

THE
ARCHITECT
& BUILDING NEWS

16 AUGUST 1956 · VOL 210 · NO. 7 · ONE SHILLING WEEKLY

- PAINT FACTORY, BATTERSEA
- HOTEL, SINGAPORE
- PLANNING I

PUBLISHED IN LONDON SINCE 1854

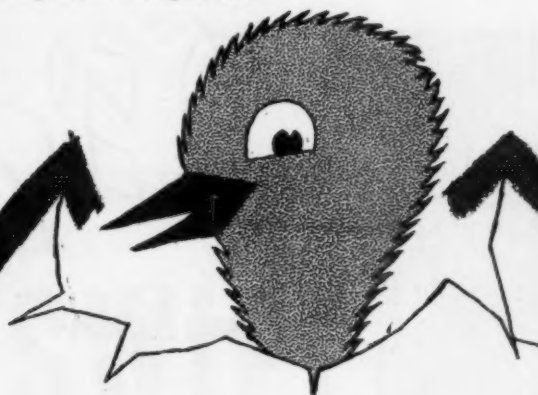
WHERE SIMPLE OR COMPLICATED SCHEMES OF VENTILATION ARE INSTALLED, AND THE OPERATION IS REQUIRED, BY REMOTE CONTROL OR OTHERWISE, AND THE WINDOWS HAVE ANY OF THE FOLLOWING CHARACTERISTICS :—

- OPENING OUTWARDS
- OPENING INWARDS
- TOP HUNG
- HORIZONTAL CENTRE-HUNG
- BOTTOM HUNG
- VERTICAL PIVOT HUNG
- SIDE HUNG
- HORIZONTAL SLIDING
- VERTICAL SLIDING



The illustration shows One Set of Electrically operated Twin Tension Rod Gear with Counter-Balance Unit operating one continuous opening light, 74' 0" long x 5' 0" deep. Note the Spiral Balance Wheel fitted at the end Sprocket.

Always Specify **WINDOW OPENING GEAR** *for*
SKYLIGHTS, LANTERN LIGHTS, CLERESTORY LIGHTS, FANLIGHTS, SIDE WALL
LIGHTS IN WOOD OR METAL WINDOWS, OR IN PATENT GLAZING, ROOF LIGHTS
AND BENCH LIGHTS IN GREENHOUSES, DAMPERS, TRAP DOORS, SHIPS SKYLIGHTS, ETC.
HAND - OPERATED—ELECTRIC—HYDRAULIC—REMOTE CONTROL
by **WILLIAM NEWMAN & SONS LTD.**
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GEARING DEPT. BRANCH WORKS 3 WELLHEAD LANE, PERRY BARR, BIRMINGHAM



take my coat . . .

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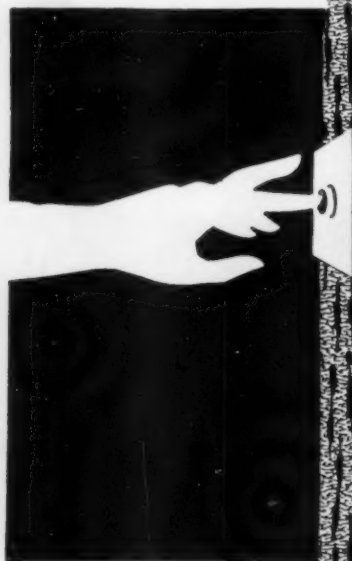
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CVS-828



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sloths use claws



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NU-SWIFT

**THE WORLD'S FASTEST
AND MOST RELIABLE
FIRE EXTINGUISHERS**

APPROVED BY THE FIRE OFFICES COMMITTEE

Model 1301 Universal (Royal Navy) Extinguisher FOC Ref. No. 104/6
for Class A fires.

Model 1400 Air Foam Extinguisher FOC Ref. No. 104/3
for Class B fires.

Model 1003 Auto (CTC) Extinguisher FOC Ref. No. 104/5
for Class C fires.

Model 2003 Auto (Chloro-flash) Extinguisher FOC Ref. No. 104/7
for Class B & C fires.

All these models comply with British Standard specifications, where these exist. No British standards exist for chlorobromomethane extinguishers or double-action nozzles like that of the Universal extinguisher. But special FOC approval has been given to these Nu-Swift features because of their increased efficiency.

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(British Standard Code of Practice C.P. 402.401 (1951) is published on behalf of the Council for Codes of Practice for Buildings by the British Standards Institution.)

Universal (Royal Navy) Extinguisher Model 1301 for .. Class A fires
Air Foam Extinguisher Model 1400 Class B fires

ACCEPTED BY THE LONDON COUNTY COUNCIL

Consent granted under Sec. 20 of the London Building Acts (Amendment) Act 1930.

All Nu-Swift extinguishers that are approved by the Fire Offices Committee.



Why Nu-Swift are better:
Nu-Swift extinguishers are the only ones on the market to combine these essential advantages.

Immediate action—
instant pressure-charge operation eliminates waiting for a chemical action to build up pressure.

Quicker recharging—
all 2-gallon Nu-Swift extinguishers can be recharged and back in use in 30 seconds.

Standard System—
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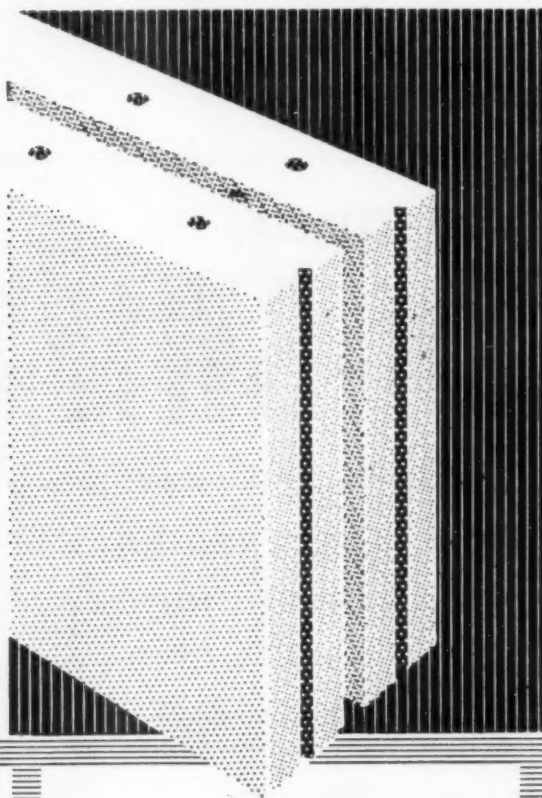
Greater reliability—
Nu-Swift pressure charges produce a pressure that is always exactly right for fire-fighting, never too great for safety. They do not leak, evaporate, or cause corrosion.

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WEATHERPROOF DORMERS ARE READILY ACHIEVED WITH LEAD

NO MATTER HOW COMPLICATED THE DETAILING

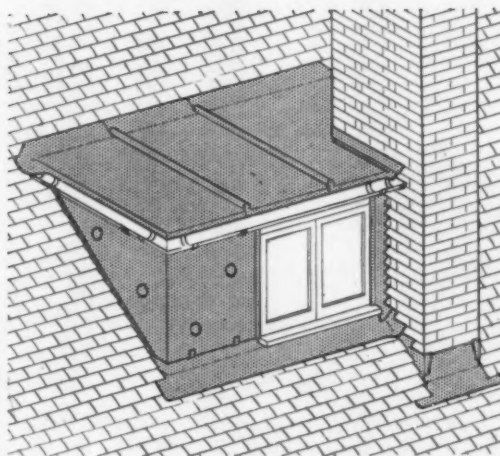
In the example shown from a house at Wimbledon

a dormer window abuts a chimney stack :

a combined dormer covering and chimney flashing

is employed

Architect : Clifford Derwent, A.R.I.B.A.



LEAD LASTS

LEAD SHEET AND PIPE COUNCIL

in association with

LEAD DEVELOPMENT ASSOCIATION

Eagle House, Jermyn Street, London, SW1

Telegrams : UKleadman, Piccy, London

Telephone : Whitehall 4175

B134

The Council's Technical Information Bureau will gladly help with problems on the use of Lead Sheet and Pipe in building work. Publications that give details of the main uses are freely available. Please state the particular interest when applying for copies.



11-Storey flats Tile Hill, Coventry.
City Architect and Planning Officer: Arthur Ling in succession to Donald Gibson.

**FOR MODERN
FLATS...**

**MAISONETTES
and CIVIC
CENTRES**

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BRANCHES

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2. Fully automatic control and the flexibility of Weatherfoil equipment ensure outstanding economy in running.
3. The amount of heat or hot water consumed can be separately metered to each flat.

Weatherfoil Heating Systems Ltd. will be pleased to co-operate with architects on any heating problem.

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Build hoardings, huts in **HALF THE TIME** with 'utility' grade plywood



Architects and building contractors—here's good news! Seaboard Douglas fir plywood, phenolic-bonded and safe for use outdoors, is now available in 'utility' grades at a considerable cost saving. This means that plywood, with all its amazing properties, may now be used for hoardings, barricades, huts and scores of other building purposes from which it was formerly excluded by price.

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Seaboard brings you seven grades of Douglas fir plywood, from smooth, sanded types to unsanded 'utility' grades. The latter types are known as SHEATHING and UNDERLAY SHEATHING and are engineered for use where strength and economy are prime factors. If your usual supplier does not stock Seaboard Douglas fir plywood, he can order it for you.

Standard panels 8 x 4 ft. (lengths over 8 feet may be obtained on order). Thicknesses, depending on grade, 1/4, 5/16, 3/8, 1/2, 5/8 and 3/4 inches.

N. R. M. Morison, Esq.,
1 - 3 Regent Street,
London S.W. 1

Please send me a free copy of the Seaboard Plywood Handbook L-11, describing your full selection of Douglas fir plywood.

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Address.....

(Please print plainly)



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CANADIAN DOUGLAS FIR

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Oil Firing **EFFICIENCY** calls for experience

Industry's need of reliable Oil Firing for Heating and Steam Raising has been met by the simplification of Oil Firing Equipment by HYDRA which has brought a new era of functional efficiency with immaculate cleanliness.

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HYDRA equipment is the outcome of 30 years' experience in the industrial field and HYDRA engineers have this experience as their background—it is not suitable for small domestic central heating or hot water plants.

HYDRA equipment has brought high efficiency, economy and above all reliability to hundreds of commercial central heating plants for blocks of flats, hotels, offices, schools, theatres, bus stations, garages etc., and—possessing a high degree of flexibility, cleanly and positively controlled—is providing heat for industrial processing including steam raising for laundries, heating for whisky and spirit distillation and food manufacture.

The outstanding feature of the HYDRA principle of Oil Firing is its simplicity—it burns ALL viscosities of 'fuel-oil' including the heaviest—therefore the cheapest—available to Industry.

There are —

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NO FILTERS — because there are no tiny holes to choke.

NO JET MAINTENANCE — because there are no jets!

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In cases of a positive SAVING OF SOLID FUEL HYDRA OIL CONVERSIONS qualify for the Government Loan Scheme—including the 20% investment allowance for taxation purposes — explanatory literature available on request.

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it costs you nothing
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For colour, finish, durability

Holoplast Movable Walls meet the demands of modern flexibility of planning, ease of erection and beauty of finish. They have made a good many changes in a good many buildings lately — and changes were never made more easily. Holoplast Movable Walls are erected ten times more quickly than ordinary walls and are maintenance-free. “Holoplast” panels are available in beautiful stove enamel finishes and incorporated or applied wood veneers.

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Write or telephone for illustrated brochure, Dept.119:—

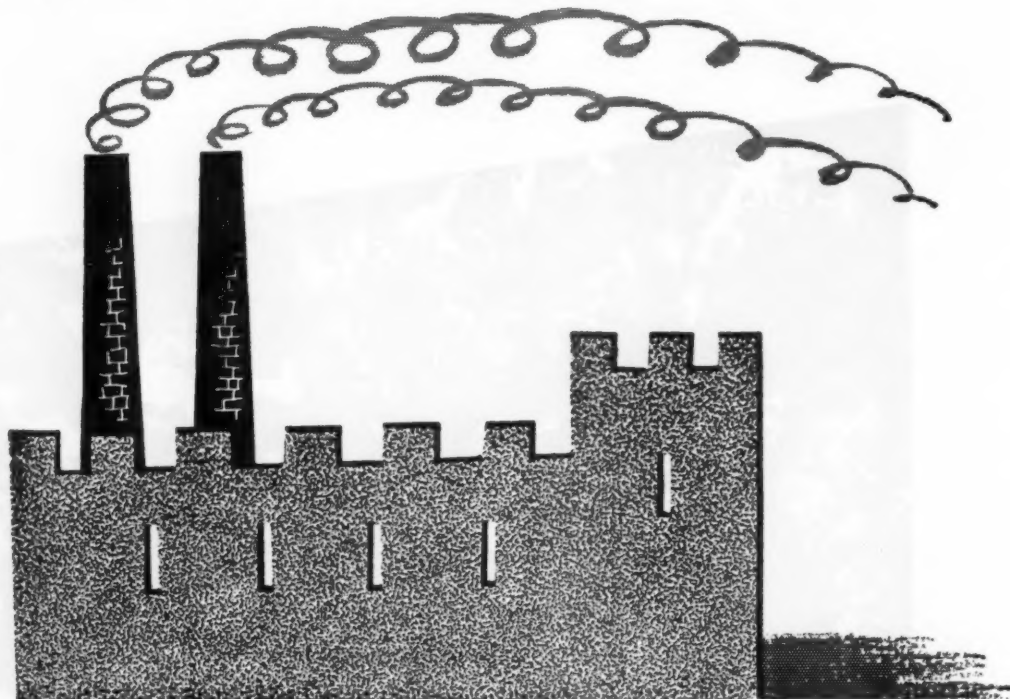


HOLOPLAST LTD. Sales Office: 116 Victoria Street, London, S.W.1 TELEPHONE: VICTORIA 9354/7 & 9981
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MW2

B

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Or using **Epikote Resins** for structural protection?

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Epikote Resins defy corrosion as never before!



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AND AT BIRMINGHAM, LEICESTER, MANCHESTER AND GLASGOW

4

BUILDING RATIONALITIES

We hear much today of 'the crushing burden of taxation', a load that seems all the heavier since there is little we can do about it.

Yet — when faced with a burden of another kind we hear very few voices raised, although we have it in our power to reduce it. The weight of a building's superstructure must sooner or later be expressed in financial terms.

What is the true price of a partition? Far more, you may be sure, than the figure expressed in the costings. A true value should include a proportion of the formidable cost of the supporting structure.

Logic, therefore, points a simple remedy — lighten the load, lighten the cost.



Factory-made partition units,
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light in weight, low in cost and
economical of site labour can
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and, therefore, overall costs.

'PARAMOUNT' dry partition

BLUE HAWK products include:—

THISTLE' Plasters and Plaster Boards 'PARAMOUNT' Plaster Boards and Partitions 'PHARAOH' Browning and Wall Finish Plasters

Write for details of light-weight Dry Construction partitions to:—

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ANOTHER PAGE IN THE "LANDMARK" SERIES



Cementone

again !



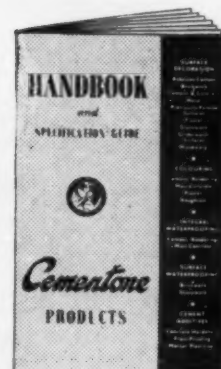
In the map above it is only possible to feature a fraction of hundreds of contracts in the Kent and East Sussex areas, where Cementone products have been specified and used. From this selection, however, can be seen the wide scope of the Cementone Range of colours, hardeners, waterproofer and a variety of specialised decorative finishes. Full details of all these will be found in the Cementone Handbook, sent free on request.

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proofing Liquid.
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ABNER comment

"Curtain walling of one sort or another being all the rage, I note that some expensive lessons are being learned. Within quite a short radius of this office there are several buildings where coloured glass in some form is being used for the panel in-filling. On one building a great many sheets have cracked right across. It would be interesting to know why. My guess is that insufficient allowance was made for the additional expansion of coloured glass. By this I mean that coloured glass in absorbing more heat than clear glass will expand more and therefore needs more room. I am glad that I shall not have to settle who is to pay for replacing the damaged panels. At the same time I hope that the designers of the other buildings will not be faced with the same trouble. It is a great pity that for the general good more publicity is not given to failures of materials and their causes."

THE ANSWER

Glass rarely breaks, once it has been fixed, through an inherent weakness. The overwhelming majority of cases of breakage *in situ* examined have been traced back either to edges having been damaged before or during fixing, or to pinching. Of the two causes of fractures mentioned, tight fixing is by far the greater source of trouble.

Clearances should cater for the need to allow the panels to enter the frames easily; for expansion differentials between glass and frame; for the provision of thermal barriers between the edges of the glass and the framework when the latter is of metal; for the cushioning of minor twists in the framework so that they shall not be carried over into the glass; and for the deflections caused, particularly in large panels, by high wind pressure.

The use of large coloured glass slabs has brought us up against the unexpected but now rather obvious phenomenon of the stressed edge. Glass, being a poor conductor of heat, will show an uneven distribution of temperature if it is only partly exposed to the sun or other radiant heat source. The temperature gradients so formed will become steeper as the colour is deepened. Owing to the time-lag before an equilibrium is reached, the immediate effect of the heating up by direct sunshine of the exposed portion of a coloured glass panel is to place the edges under tension, and, unless those edges are in good condition, they may yield at their weakest points. Cracks will then form, which as a rule will develop slowly in the early stages but may well finish with a loud report. It may take days or even weeks before a small fissure along the edge develops into a visible crack. Wired glass is particularly vulnerable.

The clearances to be allowed fall under two heads:

- (a) The perimeter clearances, as between the edge of the glass and that part of the frame which is known as the glazing platform.
- (b) The front and back clearances, as between the face of the glazing unit and the front fixing bead or angle on one hand, and on the other hand as between the back of the glazing unit and the backstop.

Of the front and back clearances the front is the more important, because it is in the outer or outermost leaf of the assembly that such radiant heat of the sun will be arrested as reaches the particular elevation. If the edges of a heated glass plate are chilled through direct contact with a metal frame, there is a considerable risk of small fissures developing at the point of contact, and that these fissures will, due to other causes, such as vibration, develop into cracks. The back clearance is, however, not without importance, because it is the combination of the two clearances, that is to say front and back, which make it possible to avoid the transference from framework to glass of the minor twists in the general structure which occur through temperature changes. While glass plates will accept a considerable amount of bowing they are very vulnerable to twist.

A pamphlet containing specific recommendations applicable to the glazing of structural insulating glasses to steel, aluminium, timber and reinforced concrete is now in the hands of the printer. Nine types of fixing detail are illustrated and examined. The choice of glazing or jointing compounds is discussed. Copies will gladly be sent on application to:—

PLYGLASS LIMITED

SANDHURST CLOSE, SOUTH CROYDON, SURREY Tel. Sanderstead 2823

Works: EDINBURGH WAY, HARLOW, Essex

Manufacturers of VITROSLAB infilling panels for CURTAIN WALLING. HEAT INSULATING LIGHT DIFFUSING PLYGLASS for the glazing of translucent roofs and walls. Also FIBROPANE & CONTRALUX GLASS for suspended ceilings.

ELLARD

ESTATE

SLIDING DOOR GEAR



The illustration on right shows yet another example of the use of ELLARD "Estate" Sliding Door Gear in the modern dwelling house. See how simple it is to convert a spacious room to one of cosy intimate atmosphere. The fingertip smoothness of door action offers immediate reduction of living space when desired with the additional

advantage of fuel economy. Elegant appearance, ease of operation and long service are the main selling features of this attractive ELLARD Door Gear. Excellent design, moderate cost and maximum use of floor space make ELLARD Door Gear the obvious choice for both council estates and private houses.



RADIAL

SLIDING DOOR GEAR

Illustration on left shows ELLARD "RADIAL" Sliding Door Gear fitted to a private garage. Sliding doors are of great advantage in protecting cars against damage caused by accidental swinging of hinged doors. In addition, valuable working space is offered where it is most desired at the entrance to the garage. Note also how ELLARD Door Gear provides easy access to and from the garage by a personal entry door. ELLARD "Radial" Sliding Door Gear is low in price and gives long service without maintenance. This gear is also suitable for the larger openings of commercial and industrial garages.

OVERDOR

GARAGE DOOR GEAR

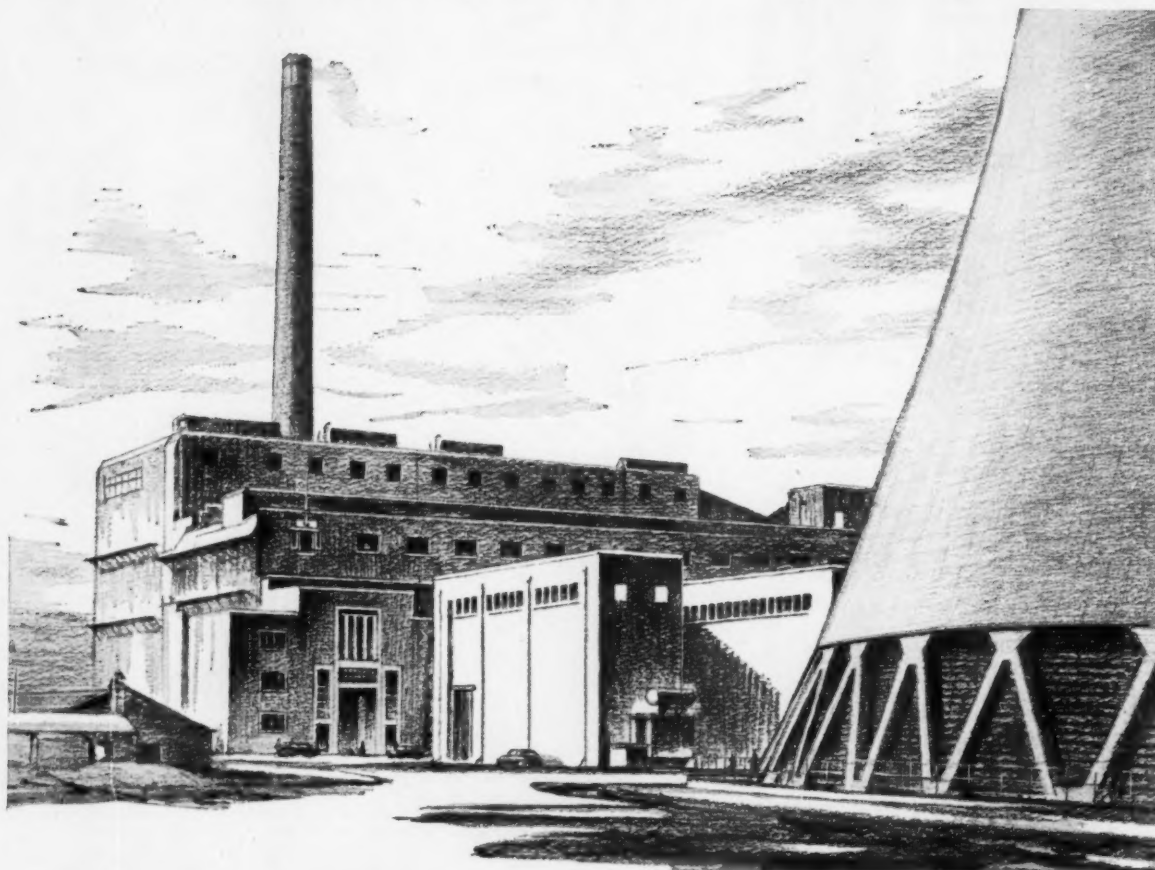
ELLARD "Overdor" gear, illustrated on right, represents the best method of operating on overhead type door, and it requires the minimum space, fixing time and maintenance. An entirely clear threshold is achieved, and both side walls are available for windows or shelves. "Overdor" gear is designed for doors from 6ft. to 7ft. 3ins. high and up to 200lbs. in weight. The door is safely balanced and can be opened and closed with ease. The width of the door is not critical but the construction should ensure that the door does not sag when in the raised horizontal position, and we suggest a maximum width of 10ft. The balance springs impose a compression force along the jambs, thus relieving the building of all stress until the door is raised, when less than half the weight of the door is supported by the twin top tracks. ELLARD "Overdor" gear is therefore especially suitable for lightly constructed buildings.



Immediate delivery of ELLARD "Estate", "Radial" and "Overdor" Sliding Door Gear can be obtained from large ironmongers and builders' merchants throughout the country.

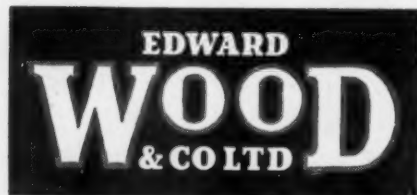
CLARKE ELLARD ENGINEERING CO. LTD., WORK ROAD, LETCHWORTH, HERTS. TEL. 613/4

LANDMARKS IN STEEL



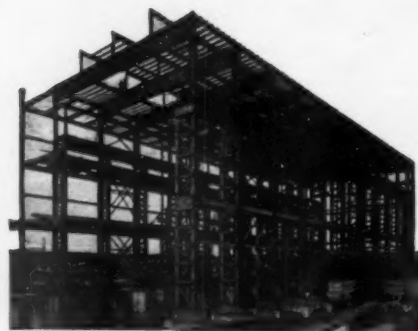
STEELWORK for **POWER**

AGECROFT—A vital link in the
Central Electricity Authority's chain
of Power Stations serving industrial
Lancashire, with Steelwork by . . .



CONSTRUCTIONAL ENGINEERS

Illustrations by
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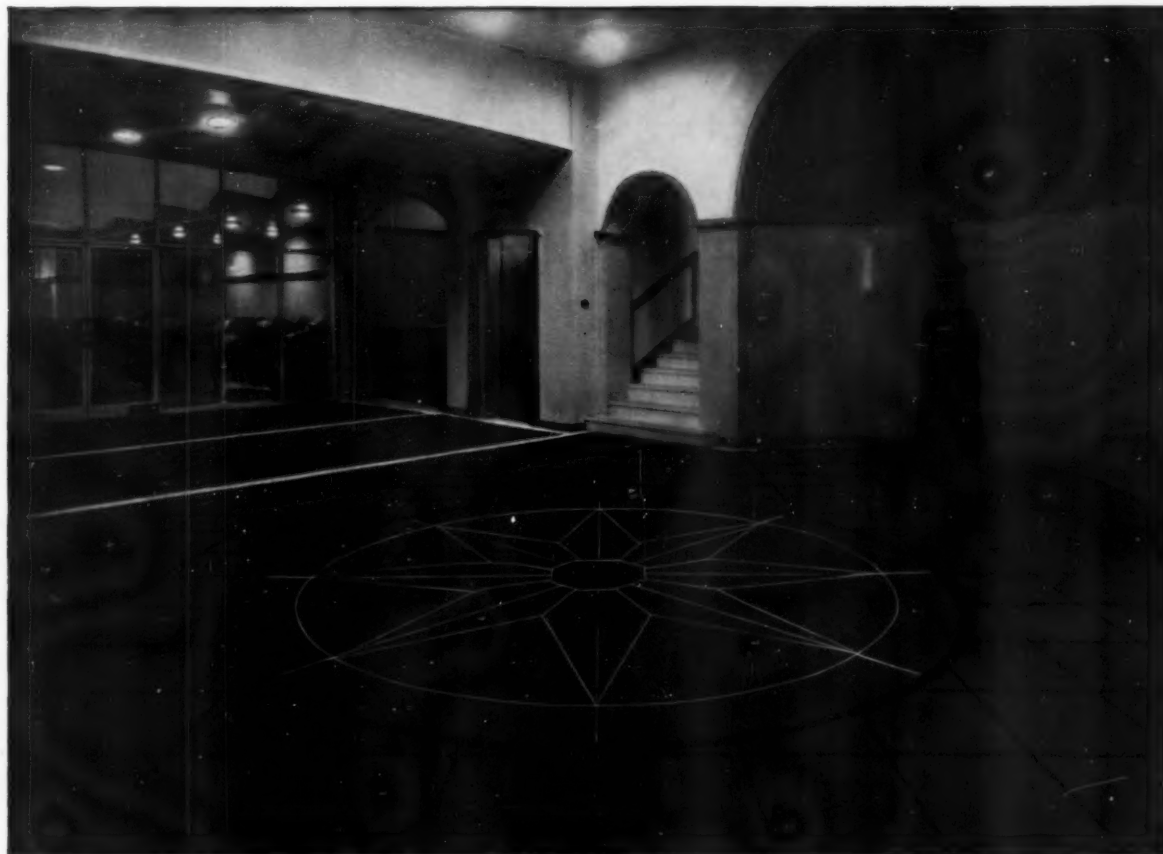


Registered Office and Works: **MANCHESTER 17**
Telephone: **TRAFFORD PARK 2341** (10 lines)

London Office: 68 Victoria Street, S.W.1. Telephone: **VICTORIA 1331/2**. Technical Offices: Birmingham and Nottingham

Barry's Heavy Ruboleum

MONARCH OF THE LINOLEUM WORLD SINCE 1907



ADAM HOUSE, EDINBURGH UNIVERSITY

Architects :

Rowand, Anderson, Kininmonth and Paul

Contractors :

Kirkald Decorative Floors

HEAVY RUBOLEUM is a superfine linoleum 6.70 mm. thick (approx. $\frac{1}{4}$ "), was first produced by us in 1907, and still holds its position of the highest merit as a floorcovering because of its properties of hygiene, resilience, durability and decorative colourings.

HEAVY RUBOLEUM is produced in 35 beautiful and popular colours, plain and marble effects.

HEAVY RUBOLEUM is especially produced for use on Ship decks and Public buildings. It is available through high-class retail Furnishers and Contract Flooring Specialists.

HEAVY RUBOLEUM is the solution to your flooring problems.

SAMPLES ON APPLICATION TO THE EXCLUSIVE MANUFACTURERS

BARRY, OSTLERE & SHEPHERD, LTD
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Protection

Settle on ATLAS PAINTS and get the best of both! These fine finishes have a great reputation as robust protectors of property and as the means of achieving rich, pleasing decorative effects which give lasting satisfaction.

The Atlas range includes ATLAS

SUPERFINISH Synthetic Gloss Paints and ATLAS SUPERCOAT Emulsion paints, as well as many other types of finishes for wood, plaster, metal, brickwork, asbestos-cement sheeting, etc.

Send now for attractive shade card and further particulars.

OR DECORATION?



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dependable

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YAS/AS. 129

Another famous firm relies on BITUMETAL



Consulting Engineers:
Frederick S. Snow and Partners,
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Mackintosh's
New Factory, NORWICH

This roof prevents condensation



This new factory at Norwich extends still further the activities of the firm of Mackintosh long famous for their toothsome products.

The nature of their business demands more than most, a roof insulated against condensation and ensuring an even temperature throughout the year and, of course, securely weatherproof and completely dustproof. They specified "BITUMETAL" by Briggs.

Much of "BITUMETAL" success is due to Briggs' Advisory Service which is probably the most comprehensive in the roofing industry. Draughtsmen are ready to assist in preparing all working details and Technicians can supervise the contract to completion.

Ask our nearest Area Office for full information.

- 1 Multi-layer weatherproofing.
- 2 1½" Cork Insulation.
- 3 Vapour Barrier.
- 4 "BITUMETAL" Corrosion-Free Aluminium Units.

PLUS:—

Attractive reflective ceiling.
No Maintenance.

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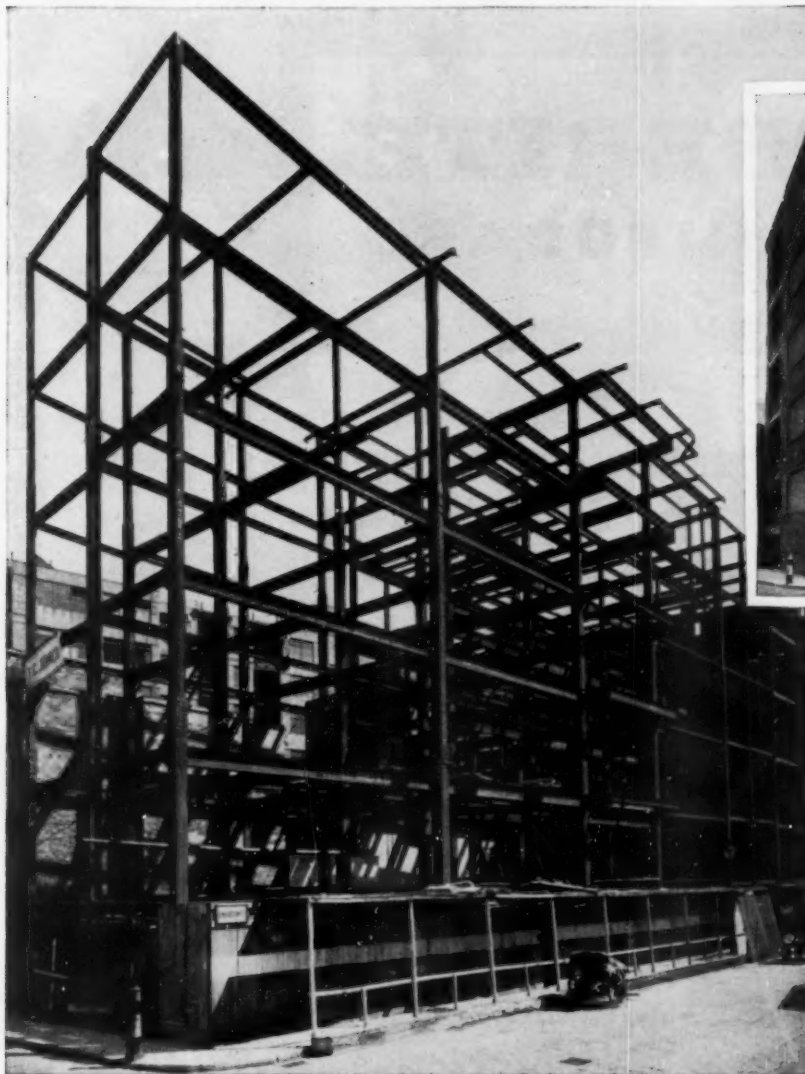
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T.I.M. - 2



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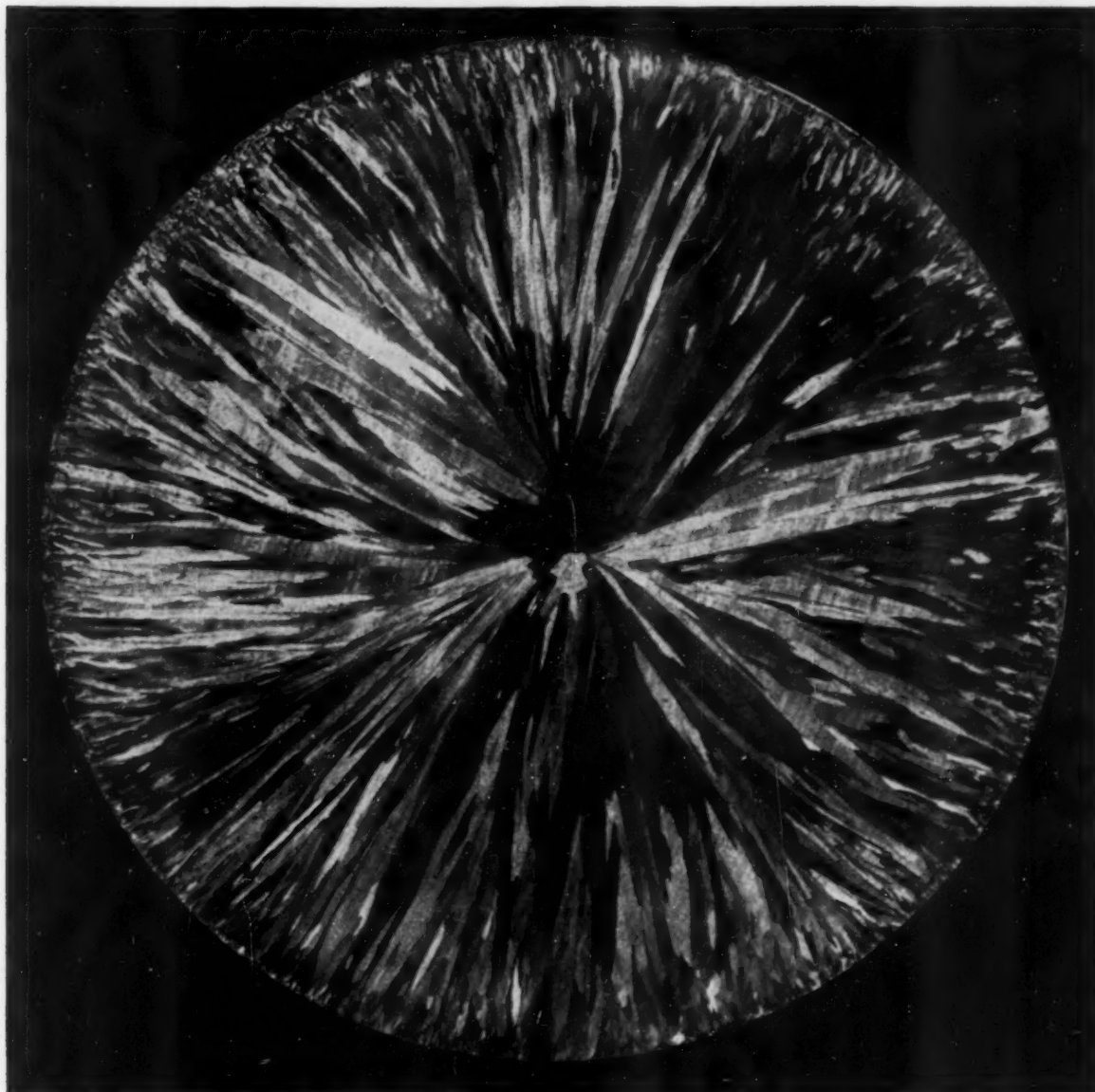
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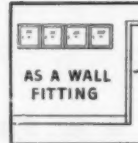
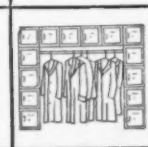
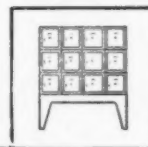
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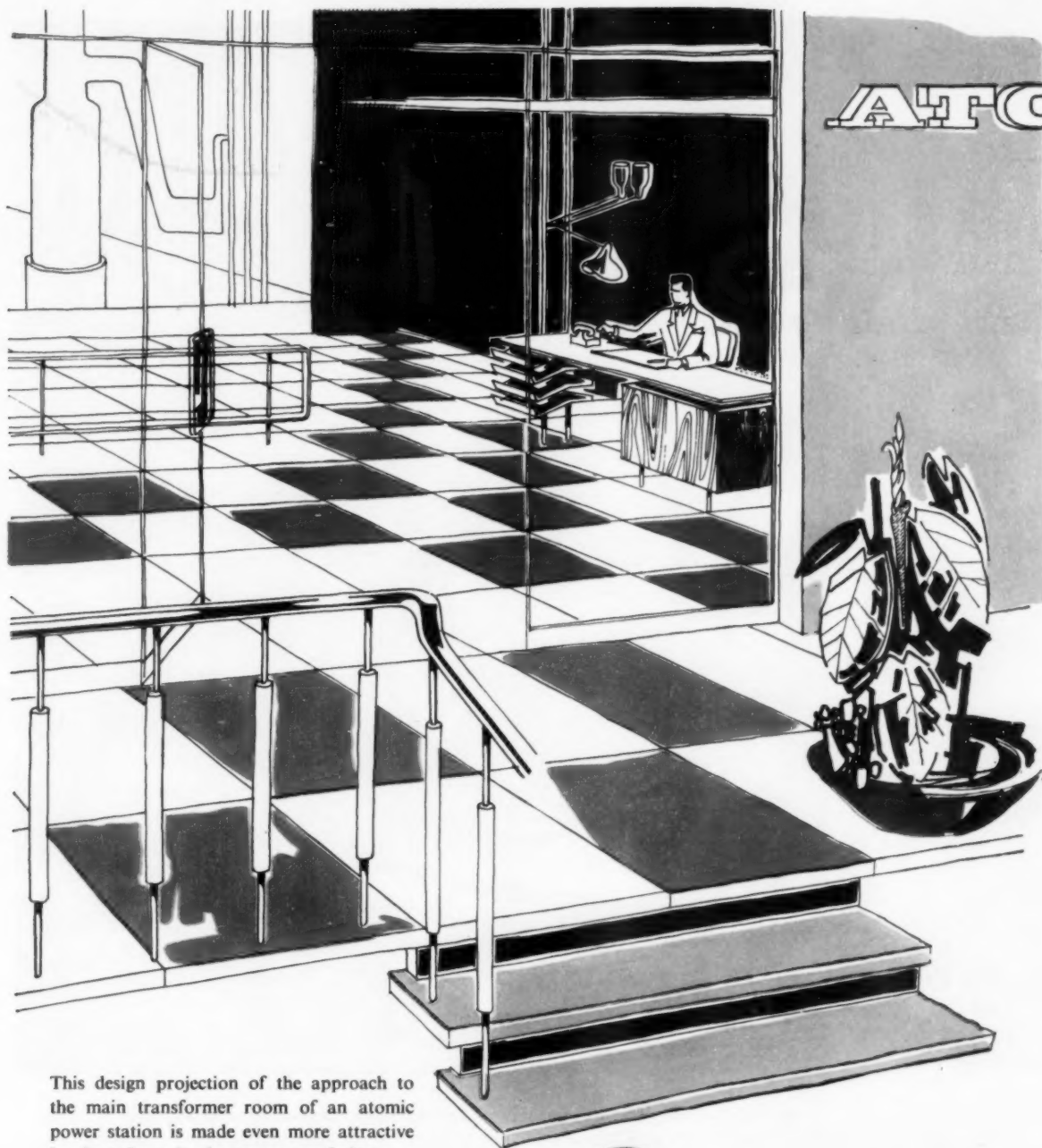
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BRITAIN'S ROADS

THE prosperity of any nation is very closely dependent on adequate and efficient communications; arteries along which its trade and commerce flow. For a nation such as ours this is particularly true, and we neglect our communications at our peril. Did not the early development of our railways do much to establish our trading position in the modern world? The decline of these same railways has given rise to much anxiety, and rightly so. This unfortunate position has been made even more serious because our roads have also failed to keep pace with continuous increases in traffic. So serious has the position become today that even a government body has felt it necessary to place its anxieties on record. The Road Research Board say* that "Our investigations indicate that the programme is out of scale with the needs and we feel that it has no hope of even keeping pace with the large increase in the number of vehicles which we have noted."

If the Board's Report indicated that the road-building programme alone was insufficient, that in itself would be enough to justify serious anxiety. But the Report goes a great deal further than that; it indicates a failure of government measures in almost every possible way.

The Report lays considerable emphasis on the total lack of information upon which any responsible body would plan important roads. "In the absence of this information," the Report observes, "there can be no assurance that any system of roads planned and executed to relieve congestion would in fact achieve this object." The implications of this statement are indeed formidable, for many hundreds of millions of pounds are to be spent on such roads. Nor is money alone at stake; vast areas of land are to be consumed and much destruction and disturbance will occur. Can a great nation whose communications are already in a parlous state afford the risk of making such gigantic mistakes?

However, the story does not end there. The Minister of Transport has already indicated that his engineers are running seriously short of practical experience. Now the Road Research Board speaks of preparation for the future road programme. The problem, the Board says, "is how to provide suitably trained engineers for the work; engineers, that is, trained in traffic engineering."

We are concerned," they continue, "that this country is seriously behind others in these matters. After remarking upon the nature of American arrangements the Board describes its own training arrangements and adds "these, however, while serving as an introduction to modern thinking on the subject, are quite insufficient to equip men who will have to tackle the country's traffic problems."

Turning to research, the Report reveals an equally melancholy picture. The Board's work is undoubtedly of inestimable value. The Select Committee on Estimates in its fifth Report, "endorsed proposals for an immediate expansion" and an appreciable increase in staff. That was in 1953. Today the Board remark: "Not only are the allocations of staff quite unsatisfactory in our view but we are further concerned to learn that the funds . . . available at the present time fall far short of the estimates . . . and are insufficient to meet the Laboratory's essential requirements; in consequence, purchase of special equipment required in the work has had to be suspended for some months." On buildings, the Board reports that "As long ago as 1945 it was agreed that the laboratory should be housed on a new site which would have room for field experiments and provide an extensive road circuit for traffic and vehicle research." Today there is little prospect of the track being completed for another three years and . . . the necessary buildings are unlikely to be available for at least eight years." It is hardly surprising that, with traffic accidents costing £72 million a year, the Board record their "grave dissatisfaction that in fact so little has been done and that such long delays are in prospect."

The Report of the Board, which must surely concern all those interested in the country's development, nay even survival, is a sobering document. It comes at a time when the efficiency and wisdom of the Ministry of Transport is more widely doubted than ever before. Inquiries held recently to consider Oxford roads, Kent roads, the Kingston-by-pass and those in other places have done little to improve the reputation of Minister or Ministry. It is time for the general public to take a greater interest in these matters; there is no better introduction than this valuable Report.

* Road Research 1955, H.M.S.O.

Abner is on holiday

Correspondence

Domestic Hot Water Standards

Sir,—I was interested to read Mr. E. M. Ackery's reply in your issue of 5th July to my earlier letter.

I think we should still provide for the Egerton Standard of 250 gallons of hot water per week, and to this would be added the recommendation of the Housing Manual, 1949, Technical Appendices which says "Not less than 255 gallons per week of domestic hot water at 140 deg. F. is the normally accepted standard for a family of three to four persons".

On the other hand, I fully appreciate that there are families, especially those without children, who genuinely do not use more than about 1550 gallons per week and in this case there is a great deal to be said for using gas or electricity.

I had not intention of implying that an electrical installation could not supply 250 gallons a week or, indeed, very much more (at a cost!), and gladly yield this point to Mr. Ackery.

Yours etc.,

W. C. MOSS.

Church Preservers at the Crossroads

Sir,—I have only just read the admirable leader under this heading in your issue of 19th July, which I missed when it came out because I was travelling in Scotland. My trip lends great point to your remarks, for the Church of Scotland (very wisely in my view) did not reject the

assistance proffered by the State, and the Ministry of Works maintains, along with many notable ruins, such great churches as Glasgow and Dunblane Cathedrals and Dunfermline Abbey.

No better advertisement for enlightened State maintenance could be found than these three churches, which are probably in a better state of structural and decorative condition than any comparable churches in England. Nor have they been turned into 'sterilised' museum specimens: notable modern stained glass is being inserted, especially at Glasgow, where it is replacing peculiarly dark and oily nineteenth-century windows. When this great work, sponsored by various Glasgow organisations, is completed Glasgow Cathedral will rank not only as one of the world's architectural masterpieces, but as one of the best displayed.

Come on, England; do not let the Scots put one over on us!

Yours faithfully,

JOHN H. HARVEY,

Consultant Architect and

Archivist to Winchester College.

Man, Bell and Bucket

Sir,—I must have been amongst the Students who attended that visit to the School of Tropical Medicine in Gower Street, mentioned by "Abner" in his first paragraph on p. 122. A. & B. N. 26.7.56.

To the best of my recollection, however, the exhibit to which you refer was captioned "The Old Man of Edinburgh," and the Parliament Square which you mention was, and still is, of that Northern Capital and not its Southern counterpart.

Yours etc.,

T. W. MARWICK.

NEWS

The Nottingham Architects' and Builders' Consultative Board has decided to present annual awards to encourage craftsmanship in the building industry in Notts, Derbyshire and Lincolnshire.

The award will be made in two classes for work which must have been completed within two years of the time the nomination is submitted. The classes are: 1, For general excellence of workmanship on a particular building. 2, For an individual piece of craftsmanship in any material normally used in building, whether the work is part of an actual building or not. August 21st is the closing date for entries for the first award to be made this year.

Minister's Attitude to Illuminated Signs

Mr. Duncan Sandys, Minister of H. and L.G., has told a firm of neon sign manufacturers that although he considers that illuminated signs are not out of place on the eastern section of the facade of the Criterion building in Piccadilly Circus, he is not prepared to approve the use of sites there for signs of an unspecified nature. It is open to the firm to make a fresh application specifying the particular advertisements they wish to display.

Claude-General Neon Lights Ltd., had appealed to the Minister against the refusal of the Westminster City Council to approve two sites on this building for illuminated advertisements. The appeal was the subject of a public inquiry on 15th May last.

A letter to the appellants' solicitor announcing the

Minister's decision says: "He accepts your clients' contention that the sites under appeal are within an area which is already dominated by illuminated advertising and has come to the conclusion that illuminated advertisements on these sites would not be out of place. For reasons of amenity, however, it is not the practice to give general approval for illuminated advertisements of an unspecified nature, and the Minister does not feel able to approve an application in the terms set out by your clients on the form of appeal. He accordingly feels obliged to dismiss the appeal."

Ickworth House Goes to Trust

The National Trust announces the acquisition of Ickworth House, Suffolk, with an area of woodlands and park amounting to 1,792 acres. This property was accepted by the Treasury in part payment of death duties and transferred by direction of the Treasury to the Trust through the National Land Fund.

The house was begun by the eccentric 4th Earl of Bristol, who was Bishop of Derry, about 1794, from designs by Francis Sandys, but not finally completed until about 1830, and the whole interior of the house is of this later period.

The house is an architectural curiosity consisting of an elliptical Rotunda, whose major axis is 120 feet long, connected by two curved corridors to flanking wings. The overall length is some 600 feet. The Rotunda is decorated with terracotta panels mainly made from designs by Flaxman.

The contents include much late Regency and fine 18th century French furniture, a good collection of pictures



Perspective of the proposed County Offices, Durham. Designs were approved by the Durham C.C. on August 1 for a 6-storied office block (right) and adjacent buildings housing a canteen, County library and printing department. Cost will be £1½m. and the site is at Aykley Heads on the City's outskirts. In 1954 plans for a 12-storied building were condemned by the R.F.A.C. and this latest design incorporates some of their recommendations.

(mainly 18th century portraits), and a magnificent collection of 17th and 18th century silver.

The Hervey family have been established at Ickworth House since the 15th century and will continue to occupy part of the house.

The house and gardens will be open to visitors. Times of opening will be announced later.

River Lee Navigation Improvements

A scheme to improve the River Lee Navigation between Enfield Lock and its junctions with the River Thames, at a cost of £864,000, is announced today by Sir Reginald Kerr, General Manager of the British Transport Commission's Waterways Division.

It is the largest project yet to be announced in connection with the Commission's £5½ millions Development Plan covering their principal inland waterways. The scheme will reduce by half the time taken by the large Lee craft in navigating the locks above Old Ford: will open up the whole section Thames to Enfield (13½ miles) to the largest barges used by the carriers, thus enabling them to increase their traffic; and will provide fully modern standards of bank protection and dredging.

The River Lee, which provides London with about a sixth of the city's water supply, runs from the Thames at Bow for 28 miles to Hertford and is an important London waterway which has been navigable from earliest times.

Ancient Monuments

The Second Annual Report of the Ancient Monuments Boards for England, Scotland & Wales is now published.

In the report covering England, the section dealing with the method of restoring the plinth of the White Tower is worthy of study. It is recommended that roughly-coursed Kentish ragstone should be used to match what has now been identified as original work.

The Board advocates that Nadbury Camp, a prehistoric hill fort in Warwickshire threatened with destruction from ironstone working, should be excavated and the ramparts preserved.

In the 12 months under review the Board for England reported 246 monuments for scheduling under the Ancient Monuments Act, 1913. As before, a large proportion (176) were in Wiltshire; Devon had 17 and Cornwall 12. The total was made up by 116 prehistoric burial mounds, 67 camps, settlements, and other prehistoric sites, 6 linear earthworks, 9 Roman sites, 2 ecclesiastical sites, 24 castles

and sites of other secular buildings, and 22 bridges, crosses, standing stones, etc.

The Board believes that there might be as many as 100,000 sites in England of some antiquarian value which could be scheduled under the Ancient Monuments Acts, but decided that all barrows and only a comprehensive selection of other monuments should be scheduled. It is expected that the total on this basis will be about 15,000.

Regret is noted at the decision to postpone a scheme to mark every scheduled monument in Wiltshire, as was recommended in last year's Report.

The Board for Scotland, where 36 monuments were recommended for scheduling in the period under review, would like to see carried out a small survey of a specific type of monument in a restricted area—the Iron-Age earth houses, or "souterrains", numerous in Angus and Aberdeenshire—so that the best examples might be considered for guardianship by the Ministry of Works.

One can sympathise with the Board and also praise them for their forthrightness when they draw attention "to the large number of ruined monuments of first-class national importance which in all parts of the country are undergoing a process of cumulative wastage and indeed, in not a few cases, of galloping consumption."

The Board for Wales notes that the Ministry of Works by acquiring the site of Llanbeblig vicarage, has saved from building development an important section of the great Roman fort of Segontium; outlines progress of the work of preserving Conway Castle and town walls, and proposes that all early Christian inscribed and ornamented stones of soft material should be placed permanently in shelter to avert decay from exposure.

M. E. T.

Gold Coast University

A contract valued at nearly £1 million for new university buildings at Legon, near Achimota, has been awarded to Taylor Woodrow (Gold Coast) Ltd., by the Council of the University College of the Gold Coast.

The work, which starts in September and will take two and a half years to complete, includes the construction of a multi-storey main college library in reinforced concrete, a Faculty of Chemistry and a Faculty of Physics, both single-storeyed and constructed in precast concrete blockwork.

The architects are Messrs. Harrison, Barnes and Hubbard, Messrs. Reynolds and Young, the quantity surveyors and Messrs. Oscar Faber and Partners, consulting engineers.

Fire Protection Centre

The Scottish Fire Protection Centre is a new venture to operate a permanent showroom service showing all the latest ideas in fire protection and industrial safety. It will be located at North Street, Glasgow in 14,000 sq ft of premises and will open later this year. It will provide a free advisory service to architects and builders on fire prevention methods and fireproof materials and will have a team of experts available for advice and consultation. It claims to be the largest and most comprehensive permanent fire prevention centre in Europe and will lease space to firms interested in showing old and new ideas in this field.

Law and Administration

Enforcement Notices

If an occupier or owner of land carries out development either without planning permission or with permission but in breach of conditions imposed on the permission, the remedy of the authority is to serve an enforcement notice. The correct service of such a notice is a somewhat tricky process and the law involved is at present one of the more outstanding disgraces of the planning field. The process is so artificial that it is by turns grossly unfair to both the authorities and private individuals. Yet another case on this matter has recently been before the Courts. The details of *Davis v. Miller* make interesting if somewhat curious reading. The point at issue was a fairly short one. In essence the question was whether an enforcement notice was valid if it was served while an appeal to the Ministry of Housing, which concerned the relevant land, was still outstanding. Mr. Justice Donovan dealt with the matter in this passage of his judgment.

"In the ordinary way, and as a matter of practice, one would suppose that planning authorities would wait until an appeal had been disposed of. But this is rather an exceptional case and obviously one which was not contemplated by the Statute because the appeal had been outstanding for over a year. It had been held up originally at the instance of the respondent [occupier], and the planning permission which he had obtained had already expired before the enforcement notice was issued . . . there is nothing either in Section 16 of the Act of 1947 (which gives the right of appeal to the Minister), or in Section 23, which limits the legal right of the planning authority to serve an enforcement notice pending the hearing of an appeal. We have been pressed with the curious consequences which might follow the exercise of such a right, and one sees that in an ordinary case there might be reasons for holding that an enforcement notice had been prematurely served. But here there are no such circumstances."

The Lord Chief Justice agreeing with this judgment added some words of advice.

"There is a perfectly simple way of safeguarding a person who has appealed to the Minister, and against whom proceedings are taken on an enforcement notice served before the Minister has given his decision. If those were the circumstances, that person could say to the justice before whom he was summoned 'I am waiting for the Minister's decision. If he has given me planning permission, it follows that I shall have committed no offence because the enforcement notice will have been invalid.' Upon that the justices would, I think, in a proper case say that they would adjourn the case to hear whether or not the Minister allowed or dismissed the appeal".

The Court in this case clearly felt little sympathy for the occupier, and the details of the case make it easy to see why. Nevertheless the Ministry of Housing only, perhaps, feel that this is yet another aspect of enforcement procedure which attracts little approval. The public may also wonder why a comparatively simple appeal was allowed to remain in abeyance for eighteen months.

The Importance of "a View"

Cases which involve building development, whether before the Courts or Tribunals, often also involve a view of the site by the Judge, Arbitrator or Inspector. This is such a common and useful practice that the observations recently made on it by the Court of Appeal in *Buckingham v. Daily News Ltd.* will be of general interest. The Court quoted with approval the words of Lord Alverstone when he said:

"A view, as I have always understood, is for the purpose of enabling the Tribunal to understand the questions that are being raised, to follow the evidence, and to apply the evidence."

The question under consideration was the place which such a view is entitled to have in a case. It is of course a fundamental principle as the Court of Appeal have said that

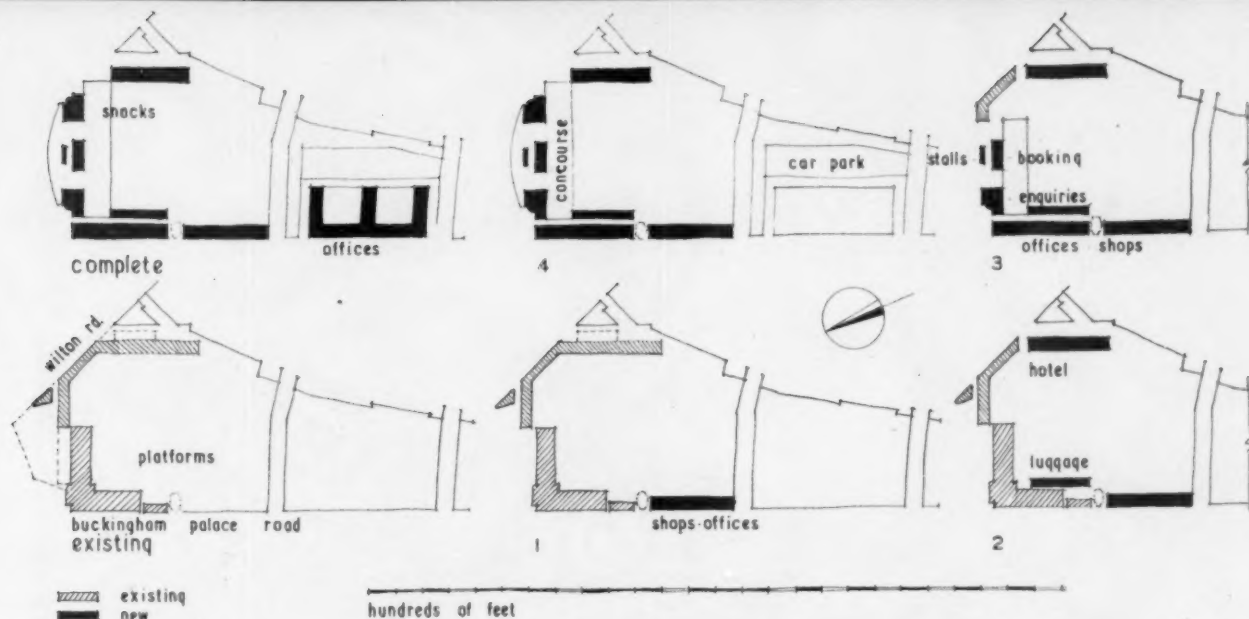
"A Judge must act upon the evidence before him and not on outside information; and, further, the evidence on which he acts must be given in the presence of both parties, or, at any rate each party must be given an opportunity of being present . . . a view is part of the evidence, just as much as an exhibit. It is real evidence. The Tribunal sees the real thing instead of a drawing or a photograph of it."

Having had a view how much weight can the Tribunal give to the impressions formed there? Any other evidence given to the Tribunal must, of course, be taken properly into account for doubtless a failure to do that would invalidate the findings. The position was put in this way by Lord Justice Parker.

"A Judge may have to decide whether steps or a staircase are dangerous in their construction or dangerous having regard to the lighting. He may have to decide whether the system of work is safe, or whether an operation is dangerous; and it seems to me that he must be entitled to form at least a *prima facie* view on inspecting the premises or the operation of the system as to whether they are dangerous or safe. No doubt he will listen carefully and consider any evidence which is put before him. Matters may come to light which were not obvious at the inspection; but in a simple case where "A" says that something is dangerous, and "B" says that it is safe, the Judge must be entitled to take into consideration what he saw and the impression that he formed at the view."

Water Supplies

One of the more important current problems which affects all forms of building and construction, either directly or indirectly, is that of water supply. The matter has already become acute as regards industrial needs in several parts of the country. There will, therefore, be many who will welcome any additions made to sources of information about water supplies. The recent issue of the *Surface Water Year Book of Great Britain 1953-54* contains a good deal of useful new material. The year book has much in it that will be useful to contractors, architects and engineers, especially those concerned with industrial work or with more general water problems.



Victoria Station Facelift

LAST Thursday, August 9, a proposed scheme for redeveloping Victoria Station was presented to the L.C.C. In an interview the architect, Thomas Braddock of Thomas & Peter Braddock, said the outline plans have been submitted for approval in principle only, final designs would be prepared on the basis of consultation between British Railways (site owners), the L.C.C. and the R.F.A.C.

The scheme can be divided into two parts with the office group between Eccleston Bridge and Queen Elizabeth Bridge being of secondary moment. The whole project is estimated to cost £3½ million and could be completed in five years and in five stages (see drawings above).

Planning.

This is one of several redevelopment plans now under consideration. The architects were commissioned by the Hammerson Group of Companies, Park Lane, who took a lead from B.R.'s indication of being willing to accept a firm building proposal that would be given planning approval.

The plans shown here indicate a 400-bed hotel on the Wilton Road side, rising 17 stories to 185ft. It would replace the present Grosvenor Hotel (owned by B.R. and 530-beds) whose lease expires in 1962. On the existing hotel site would be a 7-storey office block fronting onto Buckingham Palace Road and the present building group over the main entrance to the station could be demolished to make room

for a 10-storey office block. There would be accommodation for some 3,000 workers. The hotel would have conference and committee rooms and be predominately double-bed-roomed, each with private baths. Beneath the buildings are planned garages for 500 cars.

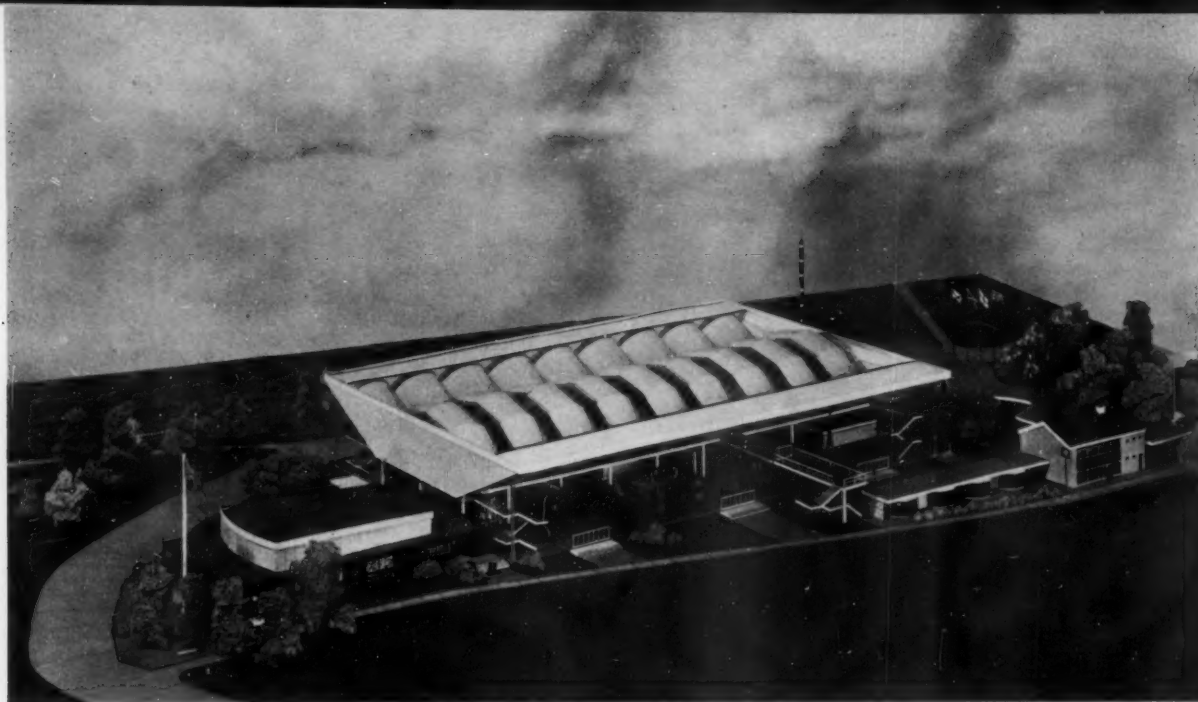
A new main entrance to the station would be protected by a steel cantilever supporting a brightly lit, flat slab. This canopy would continue inside the building and form the roof of the new concourse (500 x 100ft). At the entrance would be newspaper and refreshment stalls and the main booking office and waiting rooms.

As B.R.'s indicated that, for the foreseeable future anyway, steam locomotives would continue to run into the station, the architects steered clear of a concrete raft over the platforms and planned instead this scheme with the platforms boxed in by buildings.

An original plan envisaged creating new platforms below ground. Both ventilation difficulties and the steep gradient up to the bridge across the river, made this idea unacceptable and it was scrapped in favour of the present designs.

By planning constructions in stages, the architects have avoided major disruption of operating schedules and apart from a 40ft set back on the bus station side, the site boundaries have been retained as existing. At this early planning stage, materials and finishes have not yet been finally chosen but it is probable that the buildings will be mostly steel-framed and finished with Portland Stone.





BRITISH INDUSTRIAL PAVILION

Brussels International Exhibition, 1958

architects: EDWARD D. MILLS AND PARTNERS

REPRODUCED in this article are some of the original sketches of the British pavilion to be erected at the 1958 Brussels International Exhibition. The first of its kind since the war, the exhibition will occupy nearly 500 acres on the outskirts of the city and will be open from April 17 to October 19, 1958. Some 50 nations are participating and the Belgium authorities are expecting a daily total of 175,000 people—over the whole period this should result in some 30 million people passing through the entrance gates.

The British site, of about 5 acres will be divided into a Government pavilion (details of which will be released in the autumn) and the industrial pavilion illustrated here. Releasing details of this building to the press on July 31 (see A&BN August 2) Sir Norman Kipping, Director General of the Federation of British Industries, stressed the difference between this Exhibition and a Trade Fair. As he pointed out the items on display will be principally for advertisement and not for direct sale.

The cost of the industrial pavilion and its ancillary buildings will be about £½ million and the total cost of all buildings for the United Kingdom should be about £2 million. The F.B.I. had guaranteed £100,000 towards the cost of the industrial pavilion.

Approximately ⅓ of the exhibition space inside the building had already been allocated and another ⅓ of the area is in an advance stage of negotiations. For the remainder, Sir Norman said that manufacturers had only another two months in which to reserve space because final drawings and cost estimates had to be prepared this year. Plans for this pavilion have been accepted

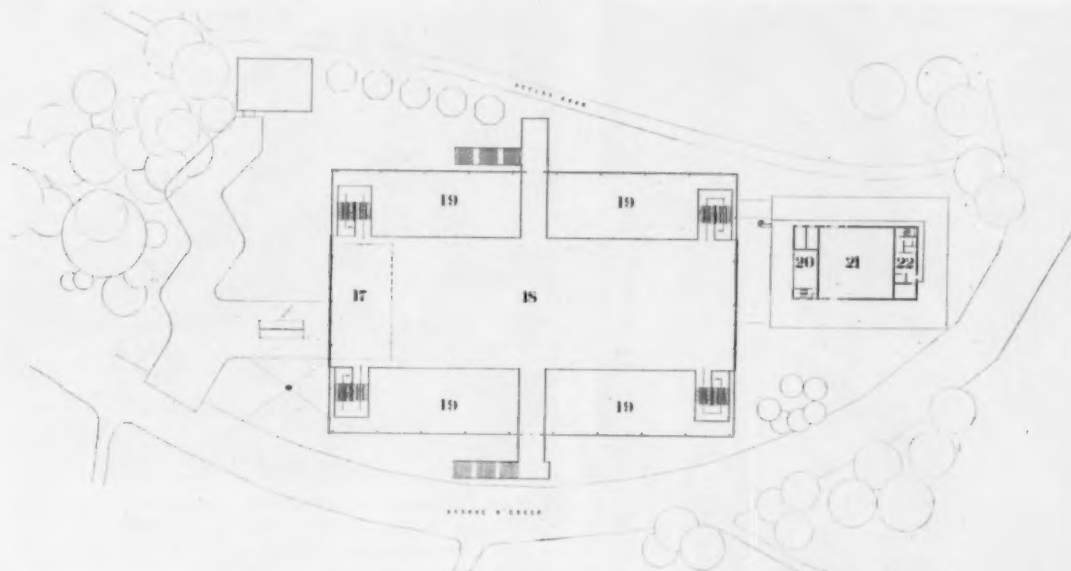
by the F.B.I. and approved by the Exhibition organisers. British participation as a whole is under the general jurisdiction of Sir John Balfour, U.K. Commissioner-General for the Exhibition who is directly responsible, through the C.O.I. for the Government pavilion. Otherwise, the F.B.I., through its subsidiary company, British Overseas Fair Ltd., are responsible for the industrial pavilion.

This will comprise three main units of which the pavilion, with its 2½ acres of exhibition space is the major area. The building will be 90m. long, 60m. wide, and 15m. high with a large upper floor. It will include a large self-service store and administrative offices and thematic displays will cover all aspects of British industry, beginning with raw materials and ending with consumer goods.

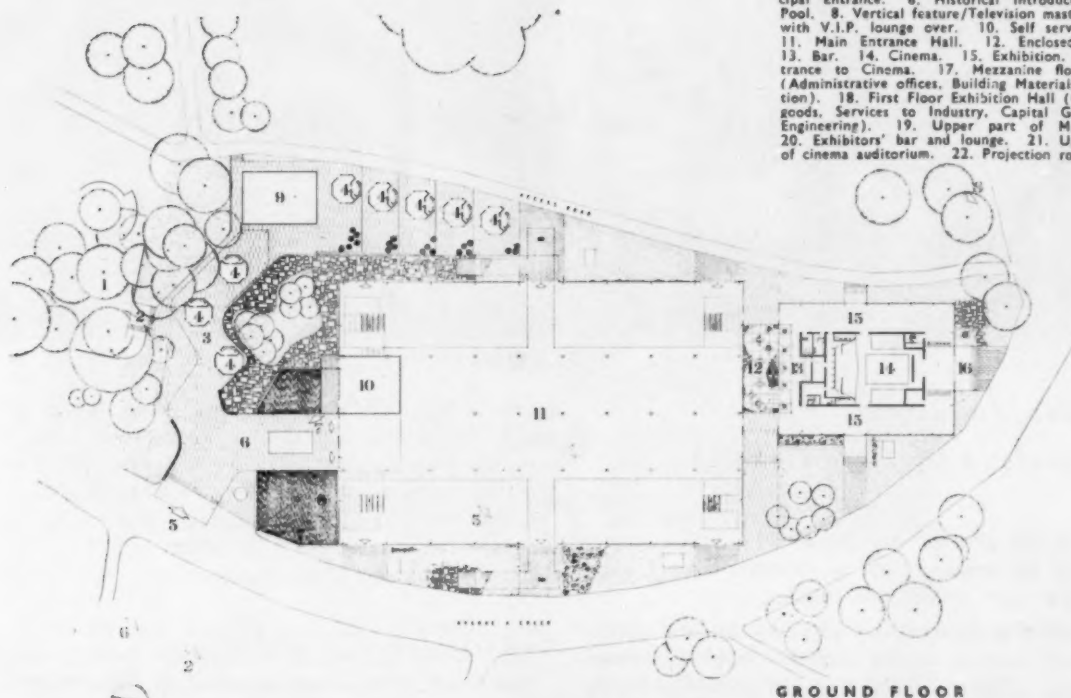
The second unit will be a paved area with trees and landscaping including shops where selected consumer goods can be purchased and in front of these buildings will be a visitors' promenade. Here also will be an Inn with large refreshment space outdoors and a lounge for V.I.P's. The area will be linked by a covered way with the Government pavilion and will also connect with the entrance to the industrial pavilion. The "Rocket" from the South Kensington Science Museum will be a feature of this entrance and it, and a small historical display, will remind people of the past played by industry in the development of scientific discovery.

Alongside the entrance is a large pool that will be floodlit and this, the planners conclude, will be symbolic of the water surrounding Britain. The high mast (see

Continued on page 224

UPPER FLOOR
KEY

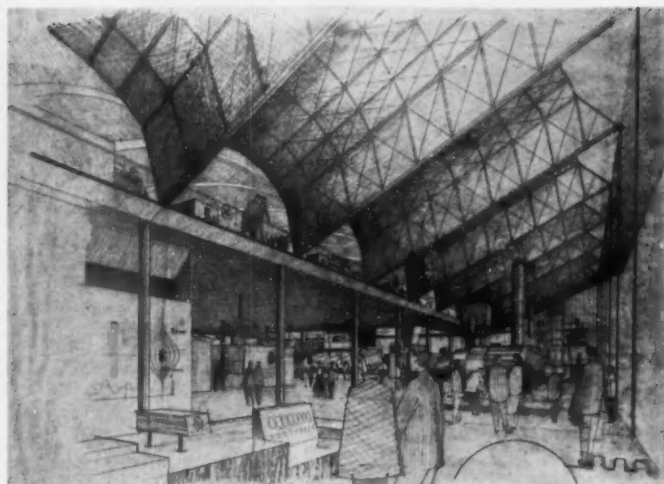
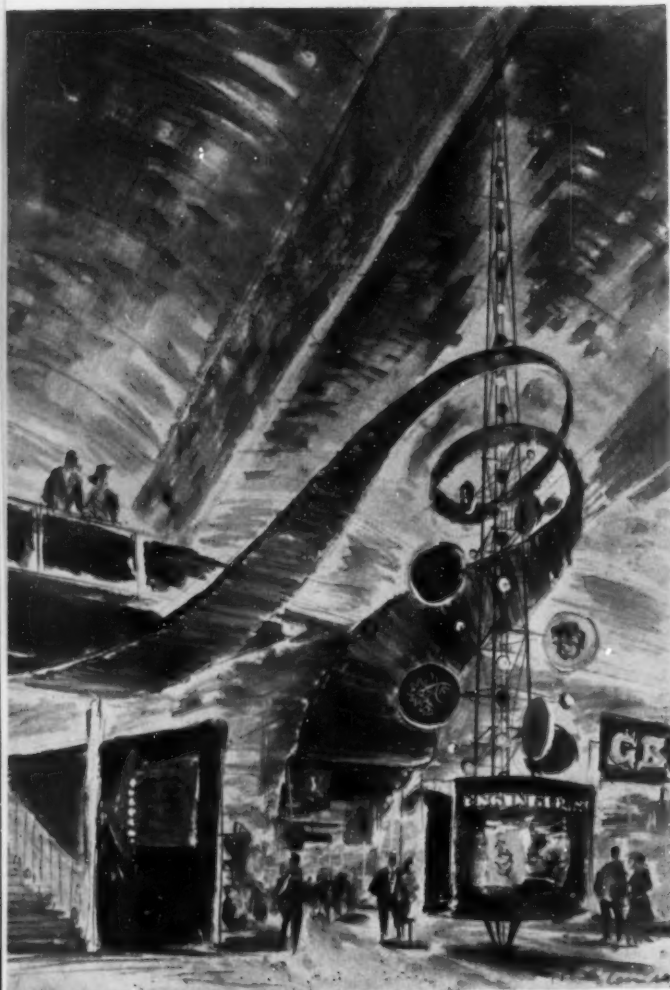
1. Official Pavilion. 2. Entrance from Official Pavilion. 3. Covered Way. 4. Shops. 5. Principal Entrance. 6. Historical Introduction. 7. Pool. 8. Vertical feature/Television mast. 9. Inn with V.I.P. lounge over. 10. Self service shop. 11. Main Entrance Hall. 12. Enclosed garden. 13. Bar. 14. Cinema. 15. Exhibition. 16. Entrance to Cinema. 17. Mezzanine floor under (Administrative offices, Building Materials' Exhibition). 18. First Floor Exhibition Hall (Consumer goods, Services to Industry, Capital Goods and Engineering). 19. Upper part of Main Hall. 20. Exhibitors' bar and lounge. 21. Upper part of cinema auditorium. 22. Projection room suite.



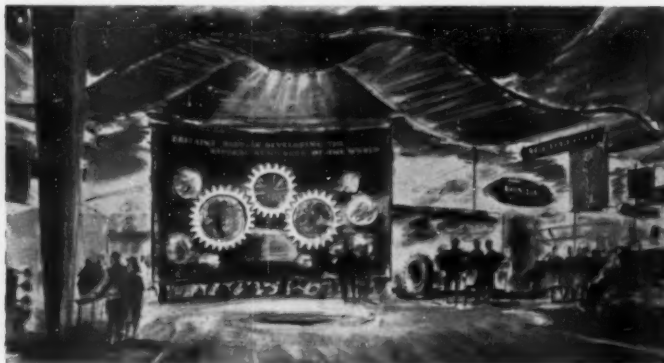
GROUND FLOOR

structural engineer:
Felix J. Samuely
quantity surveyor:
Leslie W. Clark
display designers:
John Lansdell
Arthur C. Braven
co-ordinating architects:
Howard V. Lobb & Partners
co-ordinating designer:
James Gardner





Perspective above is exhibition hall interior showing tubular steel barrel vaults. Two sketches (left and below) by John Lansdell are preliminary ideas for the link between ground and upper floor and the central feature of the engineering section.



British Industrial Pavilion Brussels Exhibition, 1958

pictures) will serve the dual purpose of a vertical feature marking the entrance and a television mast feeding television displays inside the building.

To south, is the third unit adjoining the main exhibition hall, a cinema seating some 300 people and incorporating changing rooms, a stage, public lavatories, exhibitors' club and a bar with a courtyard garden. This cinema will be fully equipped for standard film projection to show both British, Trade and feature films. It will be surrounded by a wide enclosed promenade to be used as exhibition space and will be independently operated and open to all film organisations. It will in addition be available for fashion displays, for demonstrations and for lectures.

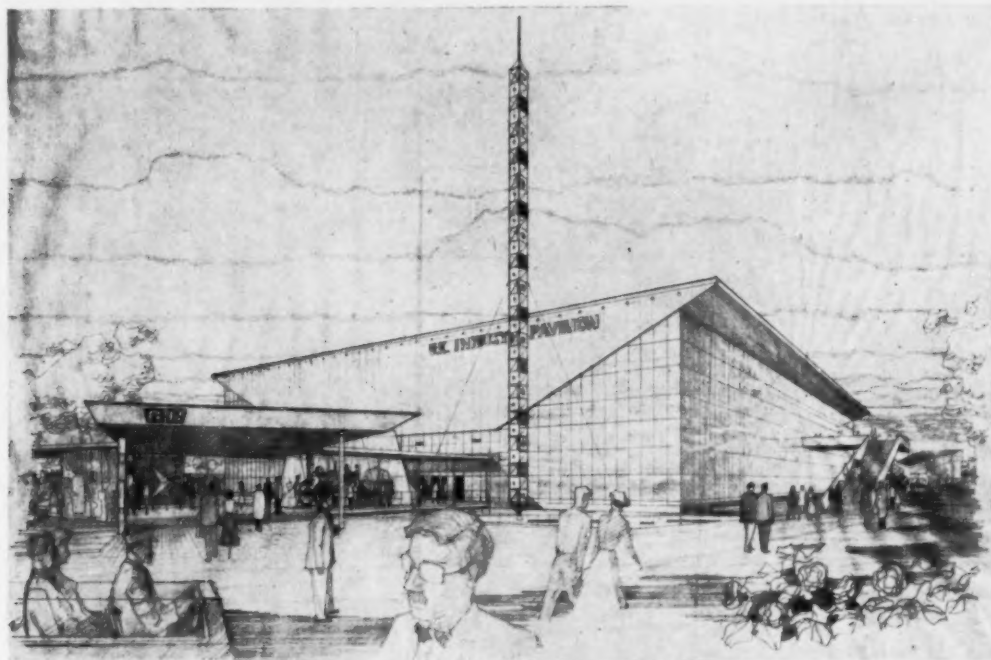
Existing trees on the site will be preserved and new trees and shrubs will be planted to achieve a formal

garden layout of the whole uncovered areas. Buildings and gardens will be floodlit at night and special illumination is being designed for the industrial pavilion so it will be in fact a vast shop window when the building is closed in the evening, but the grounds remain open to visitors. The shops, inn and cinema will however, remain open for part of the evening.

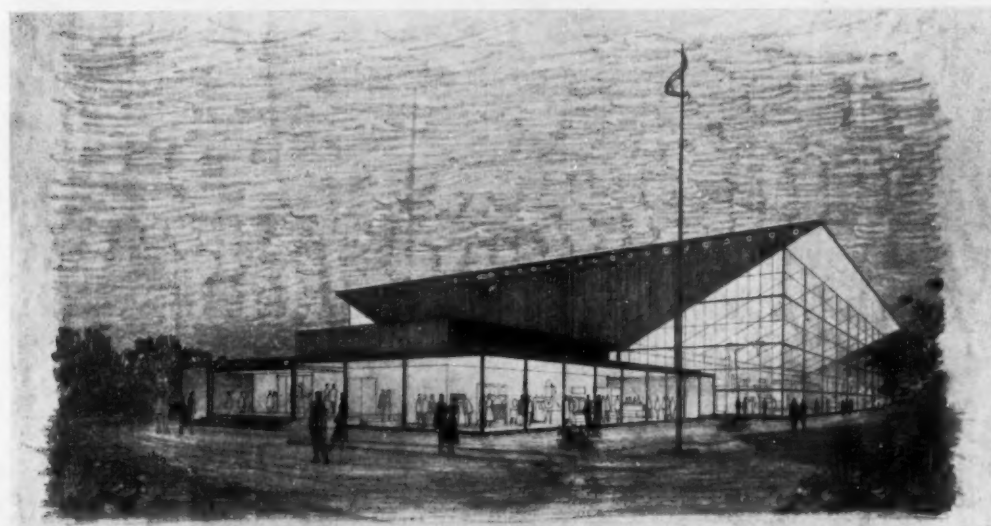
Construction

The buildings have been designed to utilize British materials and building techniques and to exploit new materials wherever possible. A spokesman of the F.B.I. said it is probable that all feasible components will be fabricated in this country and shipped out to the site. Considerable use will be made of lighting and colour.

Final designs for the pavilion envisage a steel frame structure with a roof of lattice tubular steel covered with light sheeting and with roof lighting for the upper floor. This floor will be concrete on a steel frame and the ground floor will be reinforced concrete.



Main entrance from north-west



View at night from south-east

Externally the building will be generally glass enclosed, using a curtain wall cladding system. The gable ends will be partly glass and partly a light cladding of coloured metal or asbestos cement sheeting.

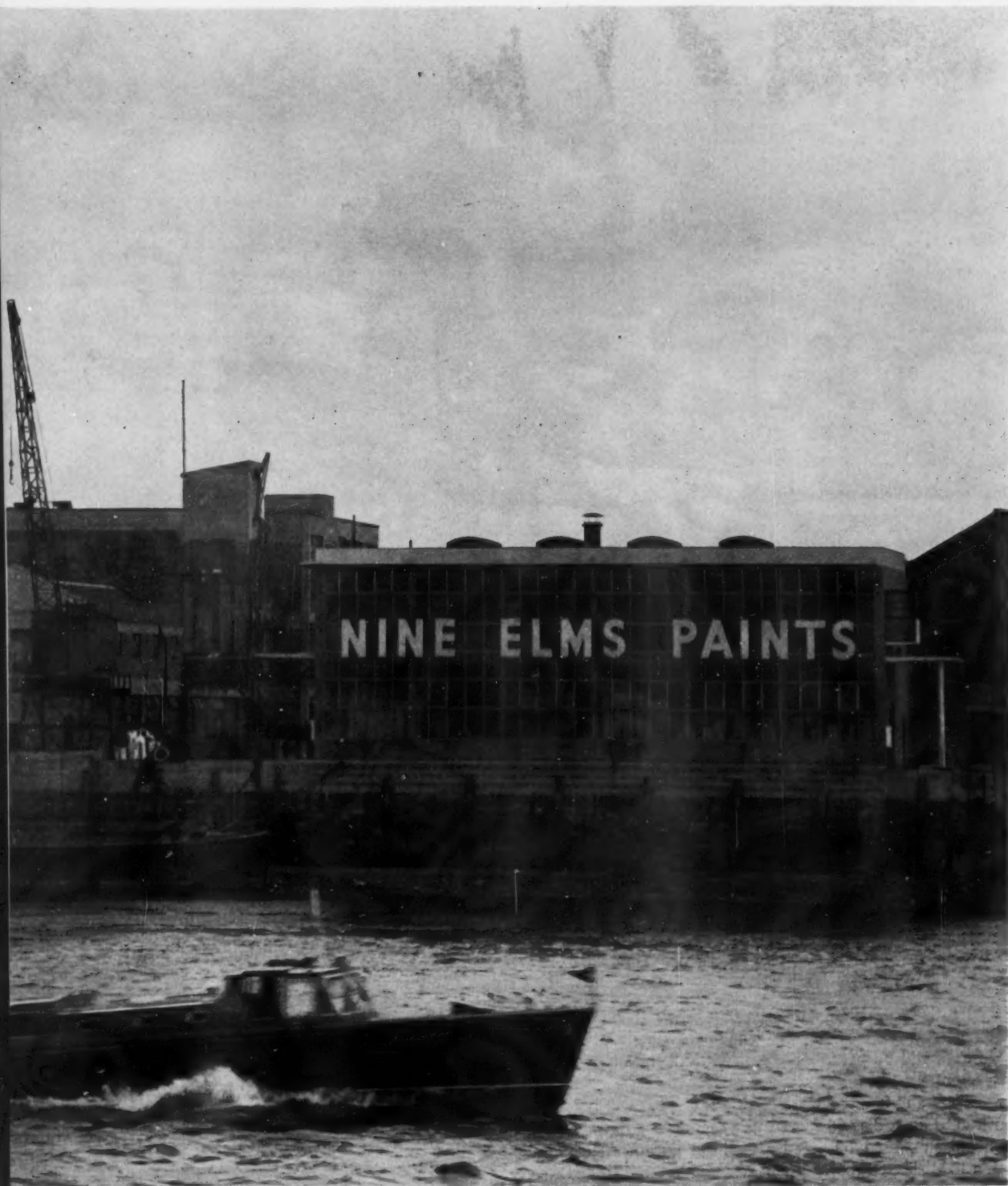
Canopies and covered ways linking the shops will be constructed on a diagrid system using laminated timber members supported on slender steel tubular columns with a light sheeted roof. The shops will be built from standardised panel units incorporating plate glass show windows and coloured sheet infilling panels.

The cinema will be completely surrounded by a glass screen giving a clear view of the internal exhibits and the brightly lit promenade will provide ample queueing space in bad weather and display areas for smaller

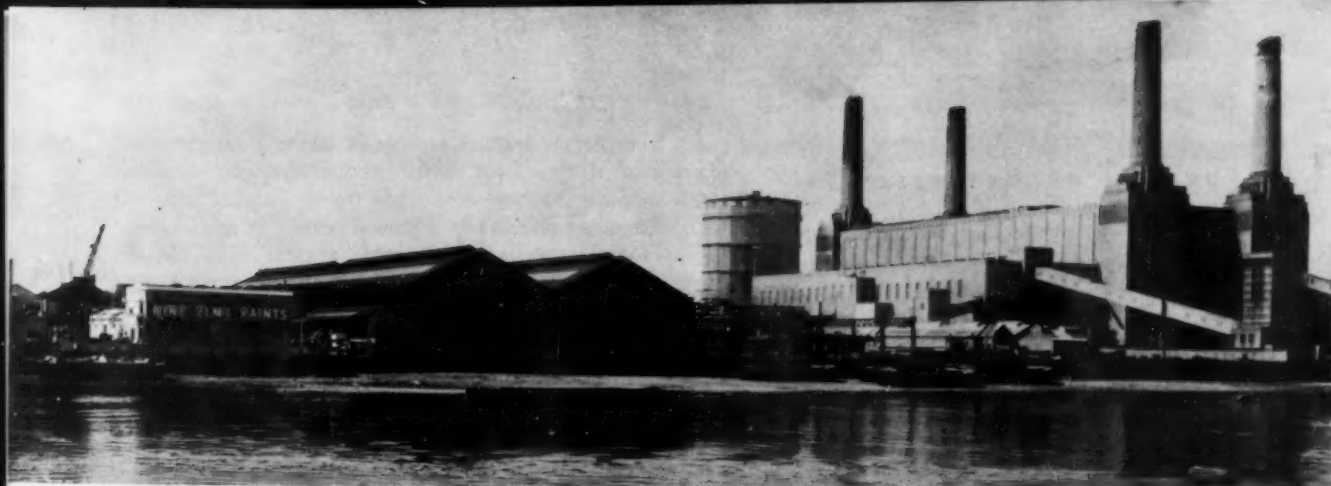
exhibits. Materials for construction of the Inn will be traditional brick, timber and tiles.

Around the buildings, in selected positions, examples of high quality industrial and engineering components (such as "a jet engine or pieces of machinery") will be displayed on specially designed bases to form sculptural decoration.

It is expected that the contractor for the buildings will be announced within the next week or two. The selection of a contractor has not been on the tender principle but on a basis of negotiation between the F.B.I. and British firms who would be able, by nature of their organisation, to cope with the specialised demands of a building of this nature in another country.



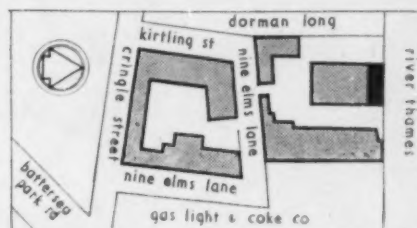
Overlooking the Thames, rising directly from the South Bank river wall, the building has been treated by the architects not only as a factory for paint manufacture but as a permanent hoarding. The facade of semi-opaque glass forms a background for 5 ft high perspex-faced lettering which is illuminated at night and livens up this side of the river.



FACTORY AT BATTERSEA for T. & W. Farmiloe Ltd.

architects: J. M. AUSTIN-SMITH & PARTNERS

assistant in charge: P. WALLER



ON the Thames South Bank, opposite the flats at Pimlico, is this new Ceilingite works for T. & W. Farmiloe Ltd., makers of Nine Elms Paint. It is right on the water-front and is the first stage of a programme of remodelling the buildings on the site.

From an early design stage it was treated not only as a factory for making paint but also as a "hoarding" to display the 5ft high, translucent-perspex-faced, illuminated lettering. The sign fits well into the simple elevational treatment and, at night, helps to brighten up this rather dingy side of the river.

At the time of photographing, although the building works were completed, the plant was not in full scale

production (strikes had held up the delivery and installation of some of the machines) and so quite a few odds and ends of equipment were lying around on the floor. This gives the place an unfinished look but enabled our photographer to aim his camera at places which will later on, be masked behind machines and piles of raw materials.

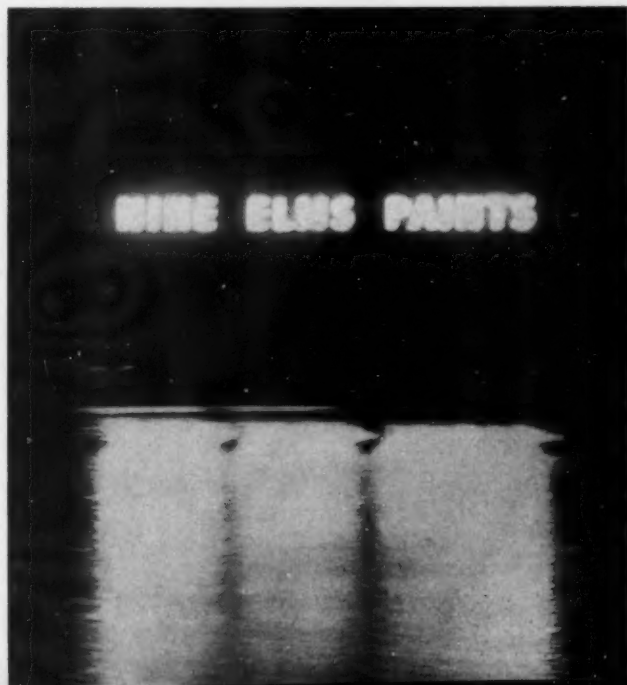
Foundations

The internal columns and outside walls stand on the old foundations originally supporting the four storey warehouse on the same site, and investigation to ascertain the extent of these, formed the major part of the preliminary work. It was found that the bases of the internal columns are massed concrete; 6ft sq and 19ft deep supported on ash piles. The East and West walls are supported on 6ft sq massed concrete bases at least 40ft deep and it was not found whether these were supported on piles. The North wall is supported on the river retaining wall.

The major part of the first floor will carry sacks of raw whiting and glue which amounts to a superimposed load of 500 lbs. per sq ft this explains the short span of the first floor. The mixers, having an all-in load of 17 tons, are raised on 12in thick independently floating slab bases. The front river retaining wall was built up in reinforced concrete and a sense of scale and the effect of masonry simulated by casting "rustications" on the face. All river wall works were to the approval of the Port of London Authority and the L.C.C. Thames Flood Prevention Department, and precautions were taken to avoid flooding from high tides whilst the works were in progress during August.

The Cantilover platforms at the West and East ends are for the purpose of receiving raw materials in sacks

Continued overleaf



Factory at Battersea



Cantilevered loading platform on East Wall. Stair is cast iron. Note cleaners/maintenance gantry

from barges and are capable of taking a superimposed load of $2\frac{1}{2}$ cwt/s per sq ft. At the West end a column supports the base of a crane (to be installed after the Building Contract) on a ground beam. A special crane cabin was designed to enable a clear view into the barges and on to the platform and also to form a feature of the riverside elevation.

Columns to the South are capable of receiving additional loading from any further future extensions of the old warehouse and reinforcing bars have been left projecting for welded connections when required for this purpose.

An internal staircase is exactly the same in construction as the external staircase but is encased to form a fire escape from the first floor, although the L.C.C. accepted both ground and first floors as one space from the point of view of fire escape.

External Walls and Roof

The North river wall was fully glazed with normal patent glazing to form a simple background for the "Nine Elms Paint" sign. Special details were evolved to suit the standard M.S. angle supporting rails for the glazing and for the lettering (see detail). The larger letters of the sign weighed $\frac{1}{2}$ cwt each and special consideration was given to the effect of high wind pressures to the glazed walling and the sign supports.

The reinforced concrete has a prismatic section with insulating screed of vermiculite concrete average 3in thick. Extract fans are built in to the concrete gable-ends of the rooflights to remove fumes and steam from glue tanks. Additional ventilation is provided by the means of aluminium louvres contained within the roof-light design.

Services

Heating is by high pressure steam from the existing boiler house. Radiating panels are positioned on the ceiling to avoid interference and damage to materials stacked against the walls. Steam is also used for processing at first floor level; and this is lagged to avoid injury to workers. The Calorifier supplies controlled temperature hot water to the lavatories beneath the Calorifier room. Lighting is by fluorescent tubing and wherever possible conduit has been run in the structure. All services pass through the Calorifier chamber and controls are centralised in this room.

A metallic hardener was applied to floors while the concrete was still green.

Glazed Wall

The problem of maintaining a clean and precise external appearance to the river and in having good daylighting led to the adoption of a fully glazed wall to the river. A gantry rail runs at high level on the river facade to enable periodic cleaning of the glazing and maintenance of the lettering. Internal decoration was applied only to the concrete surfaces otherwise the brickwork is of white gaults generally with panels of dark grey semi-engineering bricks.

General Contractors:
Hall Beddall & Co. Ltd

Balustrading (Removable):
Haskins

Bricks:
Sydney A. Hunter Ltd.
R. Passmore & Co. Ltd.

Cabin (Crane control):
Haskins.

Decoration:
T. & W. Farmlae Ltd.

Doors (Fireproof sliding):
Haskins.

Electrical Installation:
Berkeley Electrical Engineering Co. Ltd.

Heating Installation:
Engineering Service Installations Ltd.

Illuminated Sign:
London Signs Ltd.

Reinforced concrete structure, design and erection:
Trussed Concrete Steel Co. Ltd.

Roofing:
Wm. Briggs & Sons Ltd.

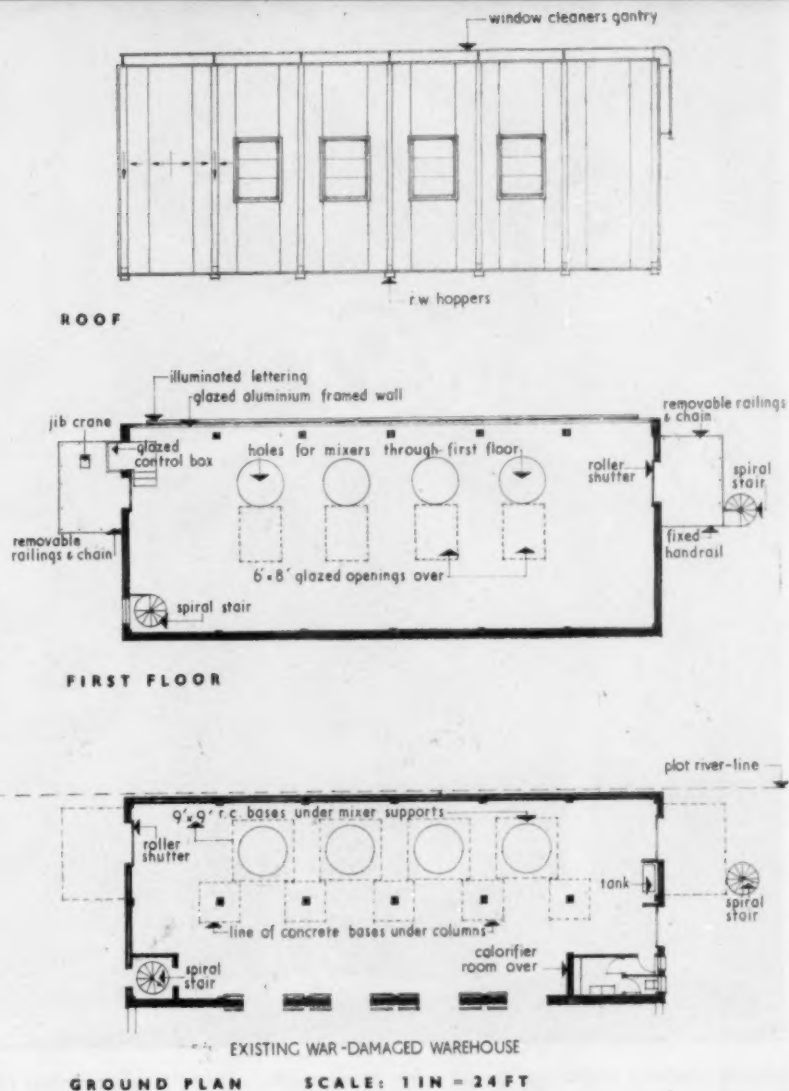
Roof lights:
Greenwood's & Airvac Ventilating Co. Ltd.

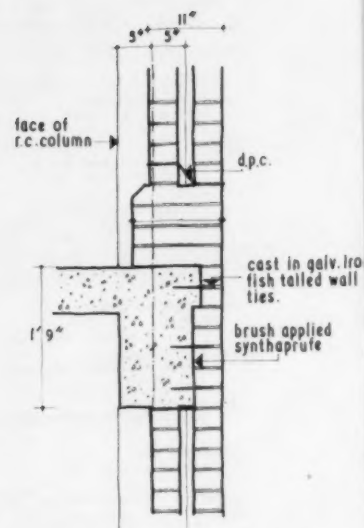
Sanitary Fittings:
Adamsez Ltd.
T. & W. Farmlae Ltd.
W. N. Froy & Sons Ltd.
Ideal-Standard Ltd.

Shutters (Roller):
Haskins

Spiral Staircases:
Haskins

Windows (Metal):
Williams & Williams Ltd.

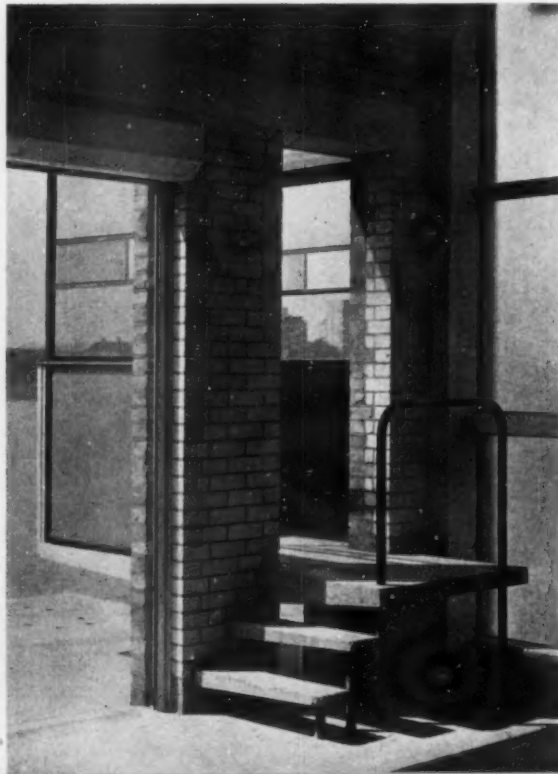
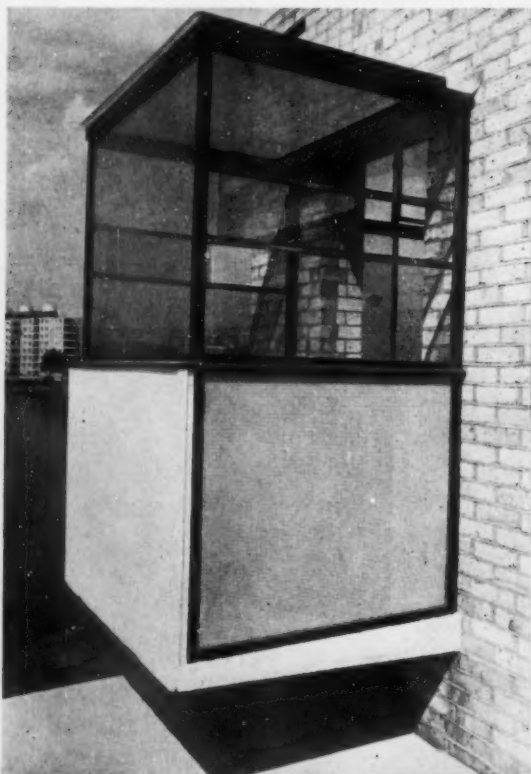


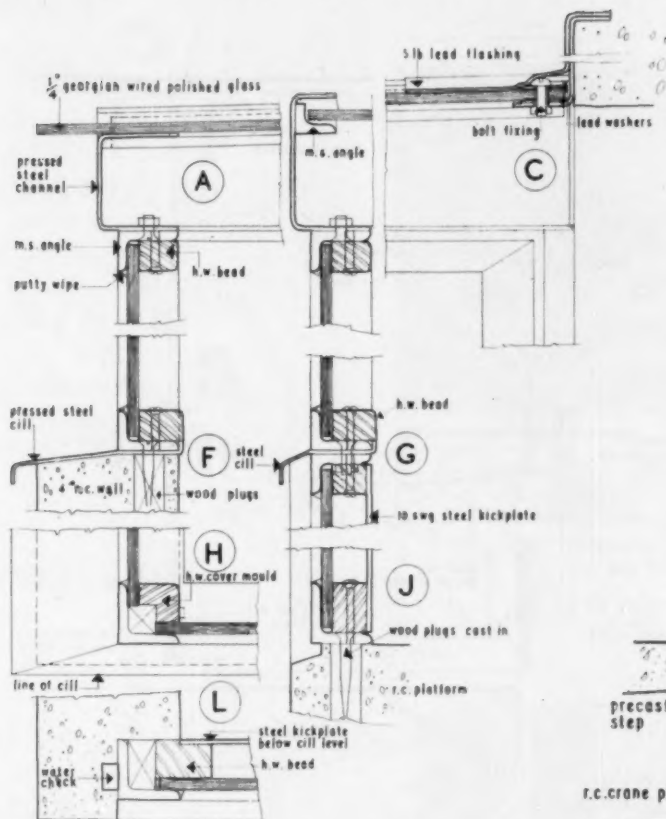


FIRST FLOOR EDGE BEAM
SCALE: 1 IN = 4 1/2 FT

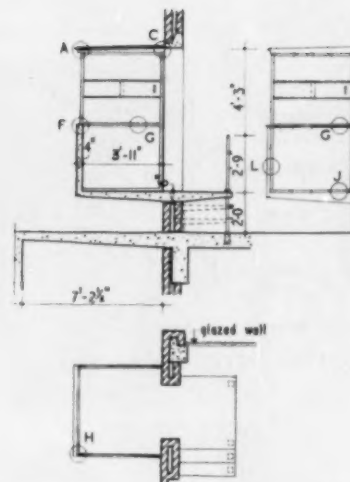
**Factory
at
Battersea**

Loading platform and crane control cabin on west side. Frame is pressed steel channel and panel facing camera is yellow painted, internally, Georgian wired glass.

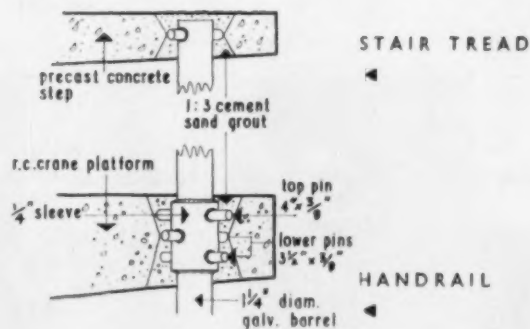




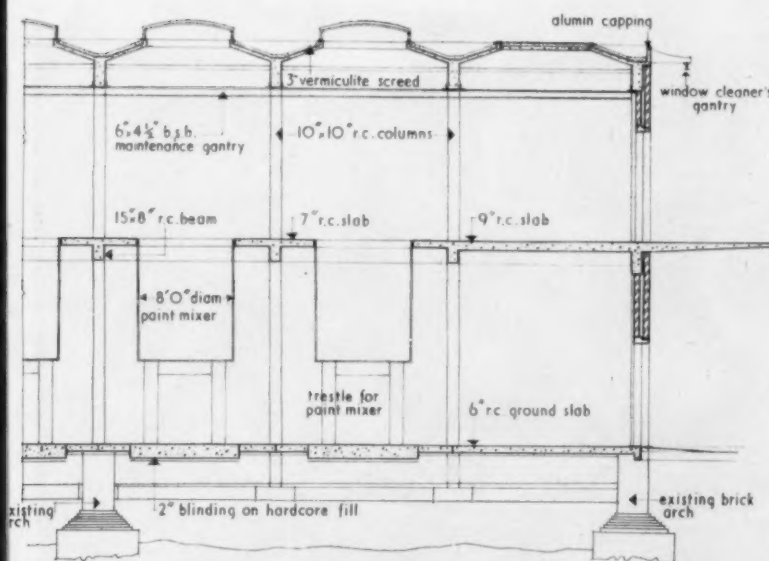
F.S. DETAILS OF GLAZING



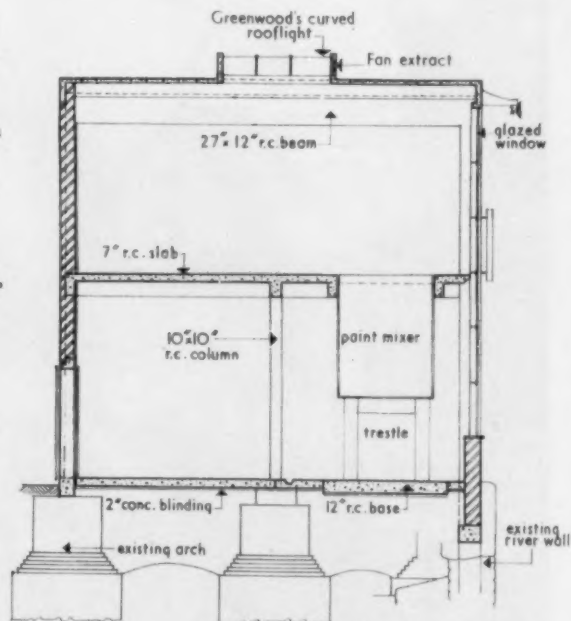
PLAN, SECTION & ELEVATION
SCALE: 1 IN = 8 FT



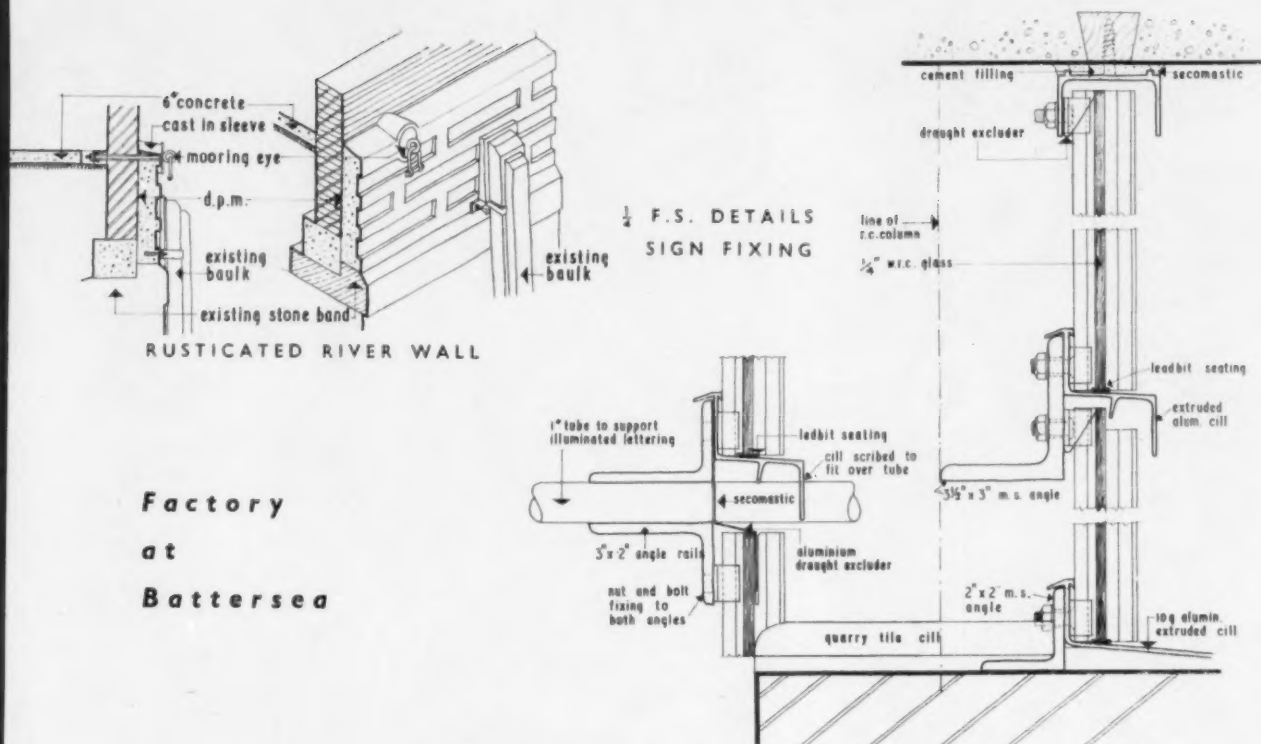
DETAILS OF CRANE CONTROL CABIN



PART LONGITUDINAL SECTION SCALE: 1 IN = 6 FT



CROSS SECTION



Looking South-West towards Battersea Power Station.

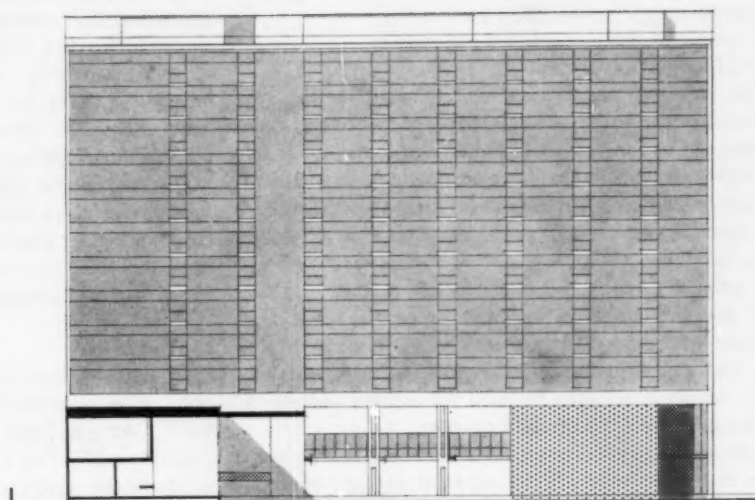


PROPOSED

KATONG

HOTEL

Singapore



NORTH SECTIONAL ELEVATION

architects:

JAMES

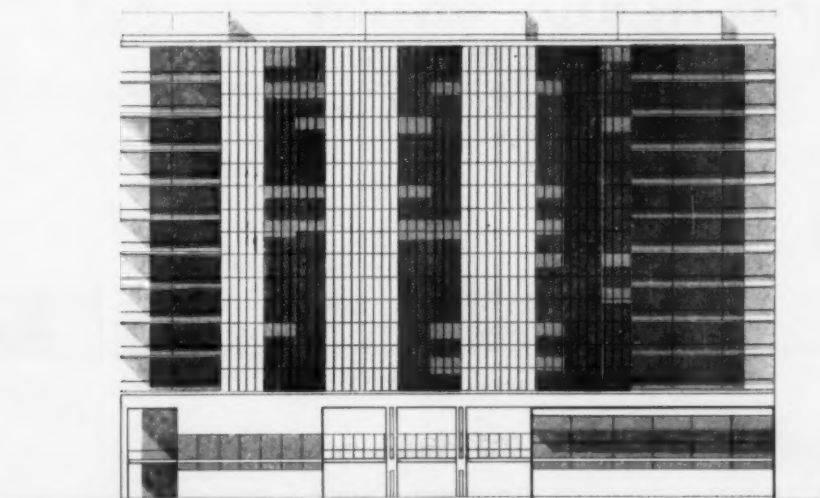
CUBITT,

LEONARD

MANASSEH

AND PARTNERS,

SINGAPORE



SOUTH ELEVATION

WE are publishing in sketch plan form the original drawings, by the architects, for the Katong Hotel at Singapore designed for the Federal Investment Co. Ltd. The designs have already been approved by the client and have received Town Planning and Local Authority blessing but at this juncture, because of Singapore's uncertain political future, it is not certain that the building will be completed as shown or converted into a block of flats.

On present estimates the cost would be half a million pounds—a relatively low figure but building in Singapore is cheaper than most places elsewhere—and

the hotel with site works would take about two years to complete.

Site

The site chosen for this hotel is right on the edge of the sea and faces across to the city which is about half a mile away due south-west. Away in the south are islands, like clouds, on the horizon. Singapore has a uniformly hot and damp climate throughout the year—there is no seasonal relief of the monsoon. The equator runs only a few miles south of the city. The architects considered that these conditions leave no

alternative to air conditioning however devitalising and expensive such a system may be.

Planning

The view, the sea breezes and the path of the sun determined designing a high block of bedrooms with the first class rooms all facing south across the sea. They are rather larger than the more economic hotel rooms of temperate climates and this extra size allows parts of the rooms to be cut off as a bedroom with a private bath, leaving a reasonable sitting room, each with its own private balcony. Luxury hotels of this kind are used by globe-trotting business executives and civil servants who need their rooms to some extent for meetings and entertaining. On each floor there are two suites which could also be used for private parties—a traditional feature of life in Singapore.

Although second class rooms face north, the view from their windows will be pleasant enough to compensate for their lack of balconies.

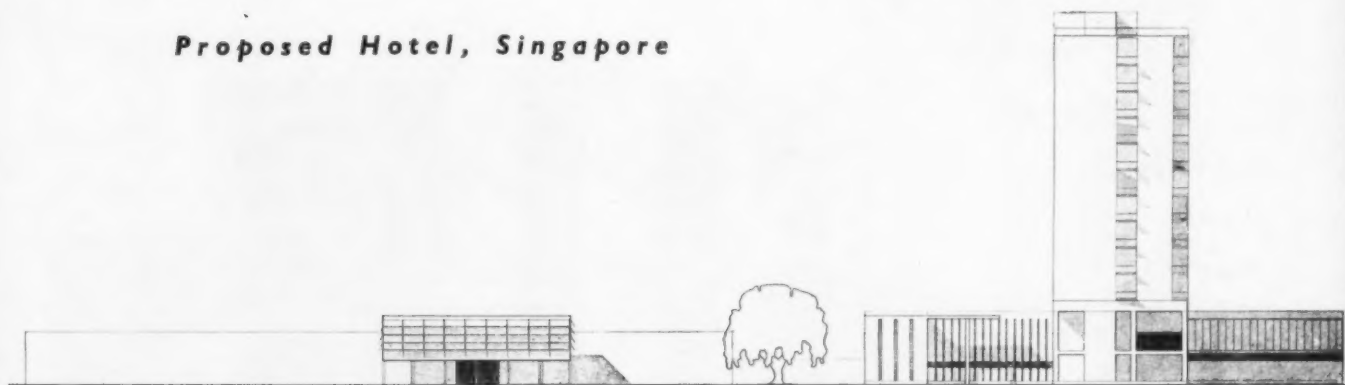
Virtually all public rooms are at mezzanine level (see plans) and this approach arose from the clients' requirements to leave a clear view through to the sea, from the entrance drive. As in Singapore most drinks are brought to the tables, the bar itself would be used relatively seldom for sitting at. All public rooms overlook the sea, the shipping and the islands beyond.

On the ground floor, and separate from the other public rooms, is a Chinese banqueting room—a requirement special to this hotel. It has its own kitchens and bars and has been designed as "a sort of pavilion" which is partly attached to the long low service wing.

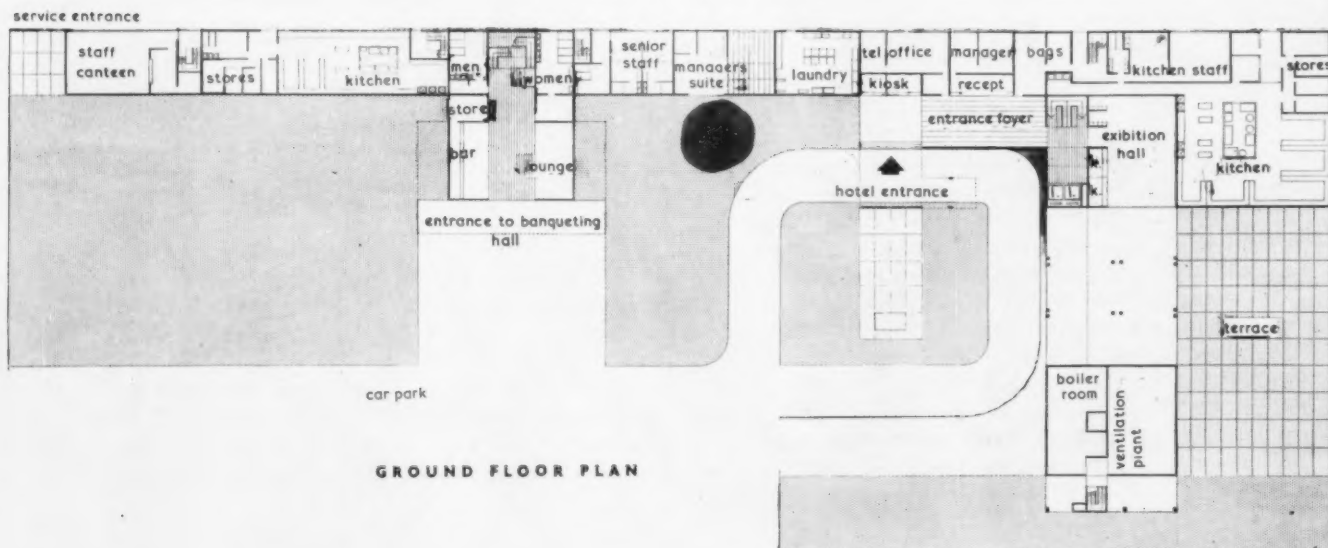
Elevations

Of the elevations which are really North and South only, it is pertinent to ask "what should they look like?" Arizona may rumble "organic" and Paris cry "functional." The Courtauld would no doubt suggest a Mannerist solution, and from less refined English circles might come confused brutal new advice. The

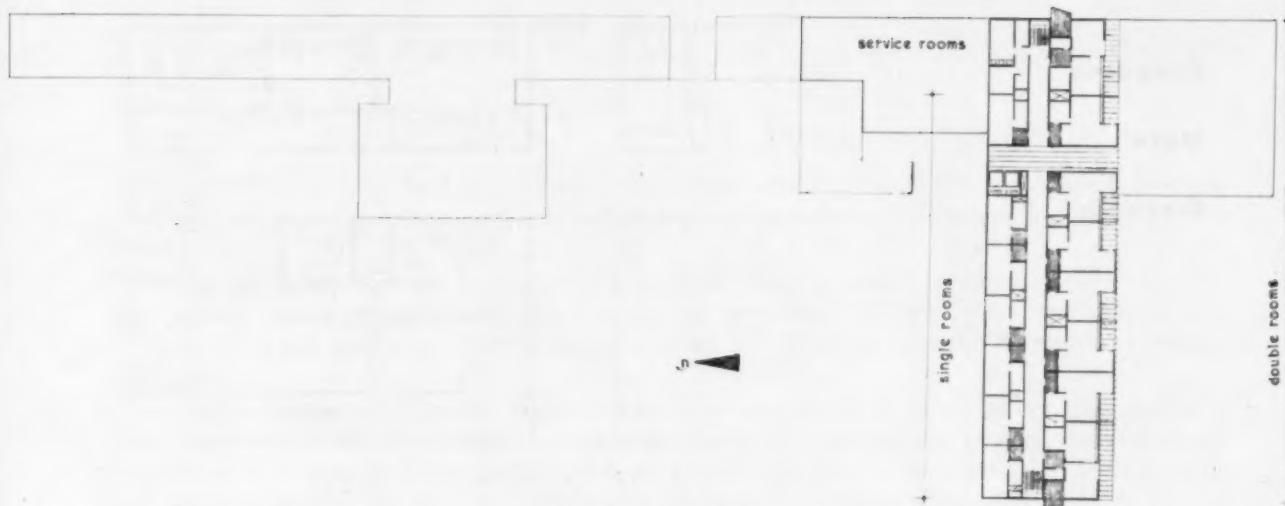
Proposed Hotel, Singapore



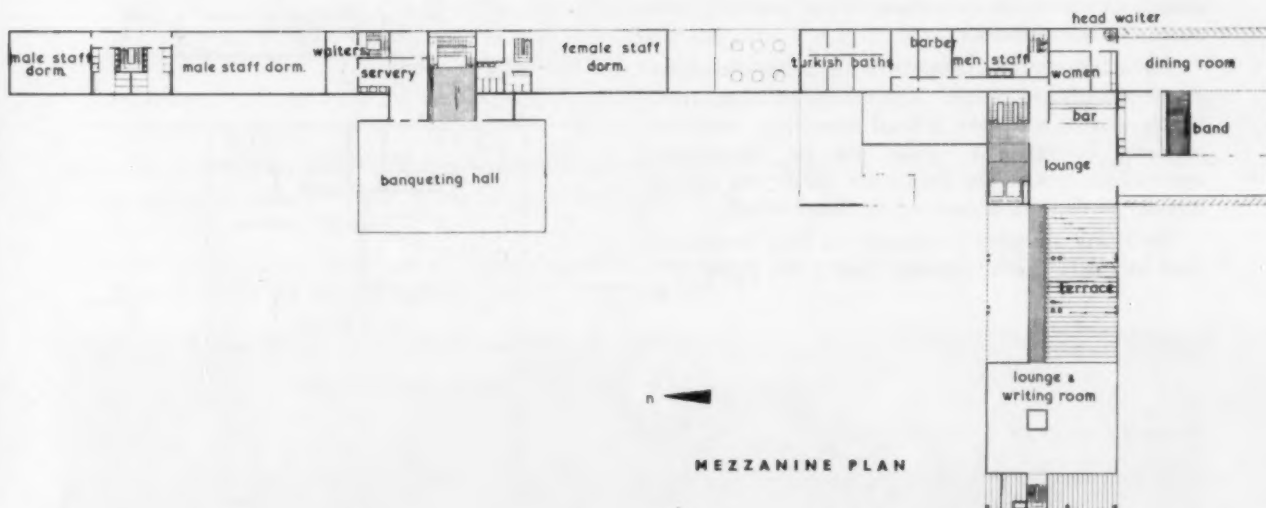
WEST ELEVATION



GROUND FLOOR PLAN

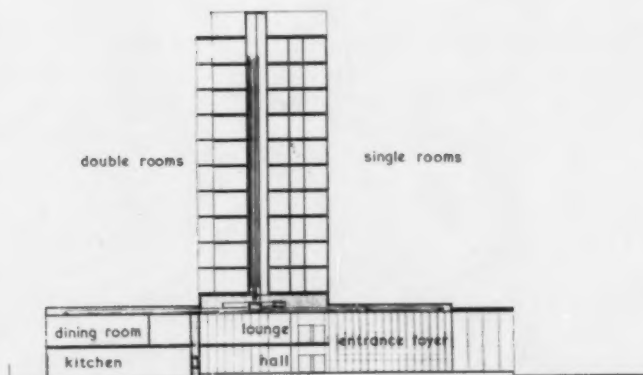
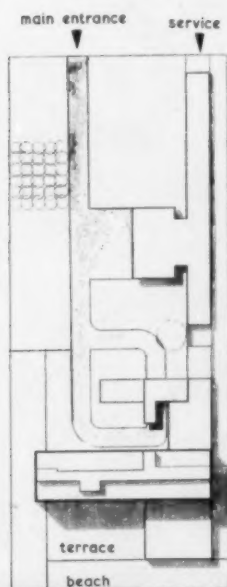


TYPICAL FLOOR PLAN



MEZZANINE PLAN

SITE PLAN



CROSS SECTION

**Proposed
Hotel,
Singapore**

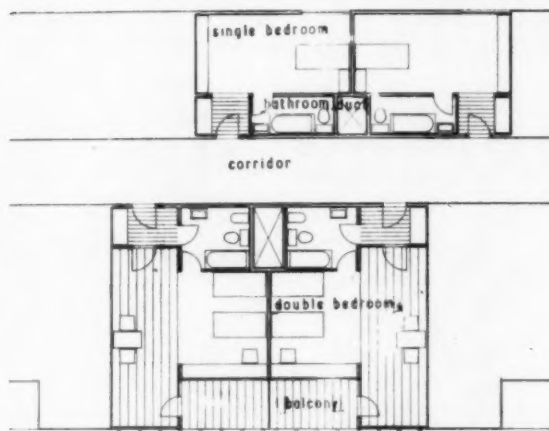


PLAN AT WEST END

gallant supporters of these mottoes are perfectly well aware of their limitations.

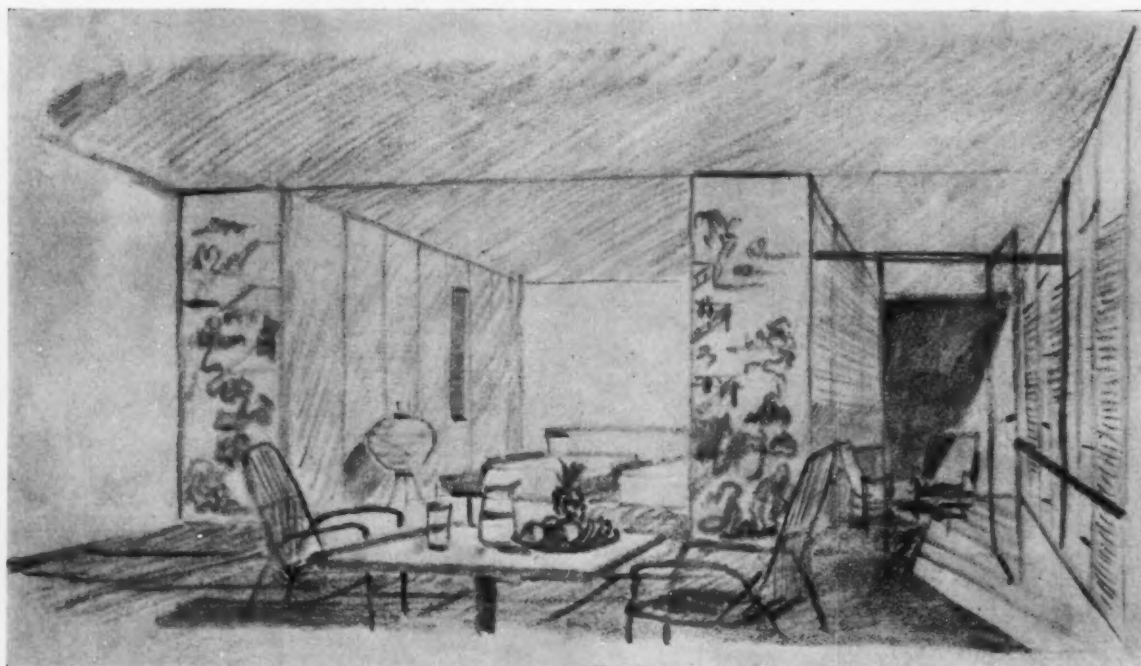
The architects felt simply that the South elevation, to the sea, should glitter. The flat elevational plane, largely glazed, will have a fixed aluminium sunshield over the central part. There will be individually operated sun-blinds. The deep recess lighting the central corridor at the lifts is enclosed by the sun-shield.

The North elevation is intended to be a pattern of glass and dark glazed coloured tiles, a flat plane.



TYPICAL BEDROOM PLAN

Architect's sketch of double bedroom



Squash Court FOR ST. ANTHONY'S COLLEGE, OXFORD

architect: STEPHEN GARDINER

THIS Squash Court is off the Banbury Road. The college authorities had no wish, fortunately, to follow the tradition of the North Oxford style and this building is designed strictly in accordance with the play requirements.

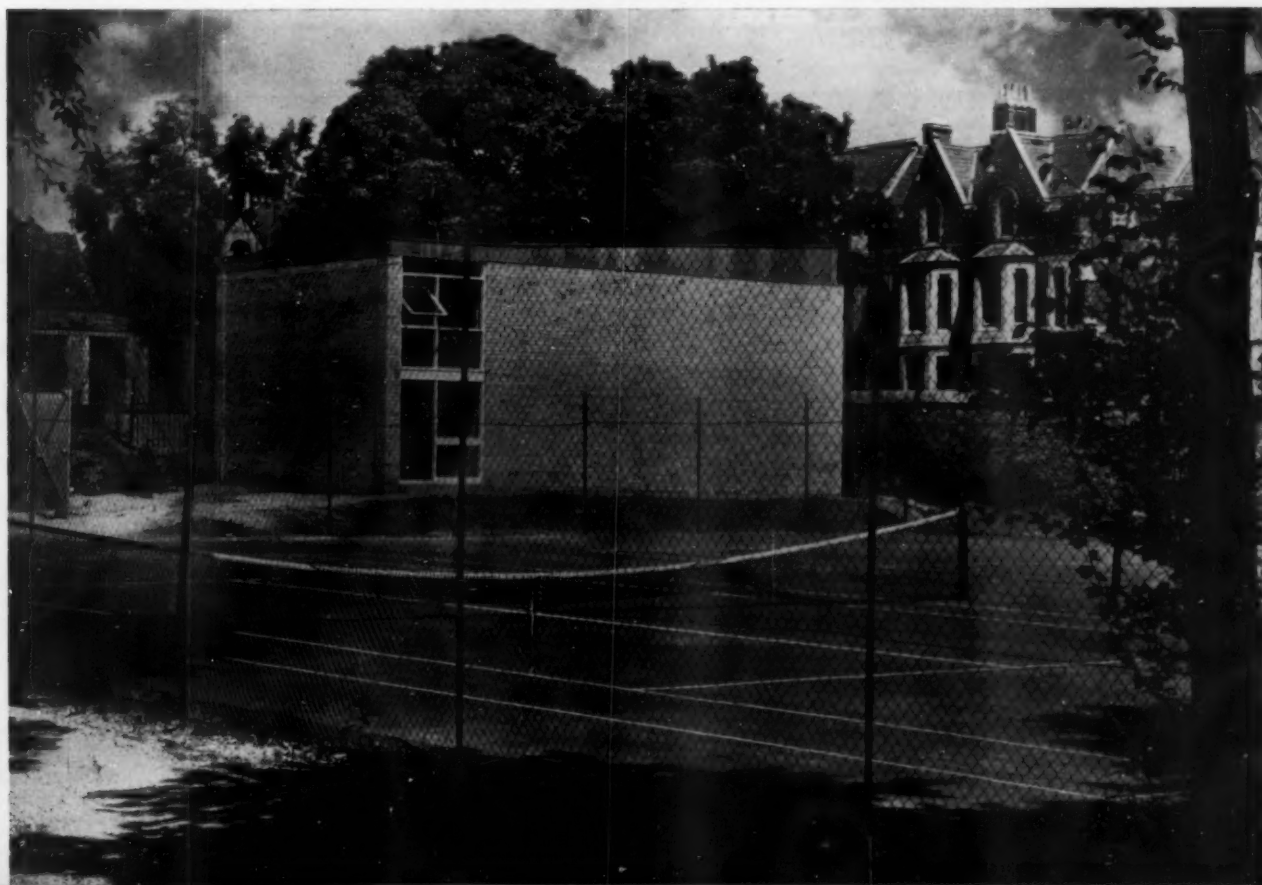
Basically, the squash court is a brick box, but in order to reduce the area of brickwork and to keep heights down to a minimum at the gallery end, a cedar-boarded top was devised which rises to the predetermined height of 17ft 6in at the play end. This top also incorporates louvres in it for ventilation so that the main brick areas are undisturbed.

Windows are confined to the gallery, entrance and staircase bay, the interior of the court relying entirely on artificial lighting to avoid the breakage and maintenance of windows in the roof that the usual kind of court contains. Colour has been confined to all parts of the court above the play line — the side walls are apple green, the cross wall of the gallery olive green, the ceiling (except for the R.S.J.'s which are white) cornflower blue. The play line itself is scarlet. Everything else is white.

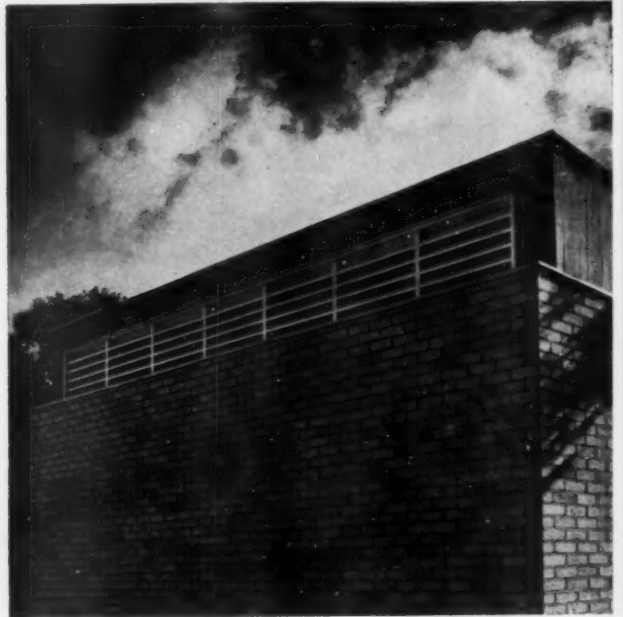
The structure is brick piers with infilling panels of 4½in brick external and 6in blocks internally which, together with a 3in cavity, produce a flush surface internally and externally. The piers support 6in x 6in concrete feet which support 10in x 5in roof joists spaced in a way suitable to the plan. The timber top is constructed as follows:— The internal 6in leaf is brought up to joist level. The external boarding is on 2in x 2in framing. Internal finishes are brick in entrance hall whitewashed, hard plaster in court, and maple flooring. External brickwork is a local cream clay brick.

The contractors: Hinkins & Frewin, Oxford, sub-contractors — Electrical: Electricity Board. Felt Roofing: Neuchatel Asphalte Co. Ltd., Maple Flooring: Hollis Bros. Ltd.

A view of the finished squash court. It was designed to have another court added later, of similar design and built off the wall on left side of picture with the gallery common to both.



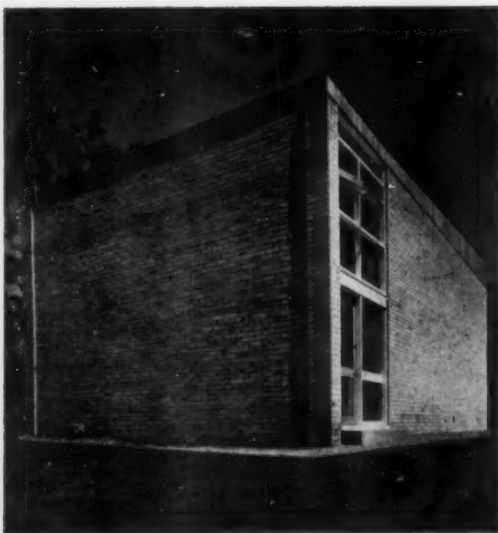
Glazing to gallery



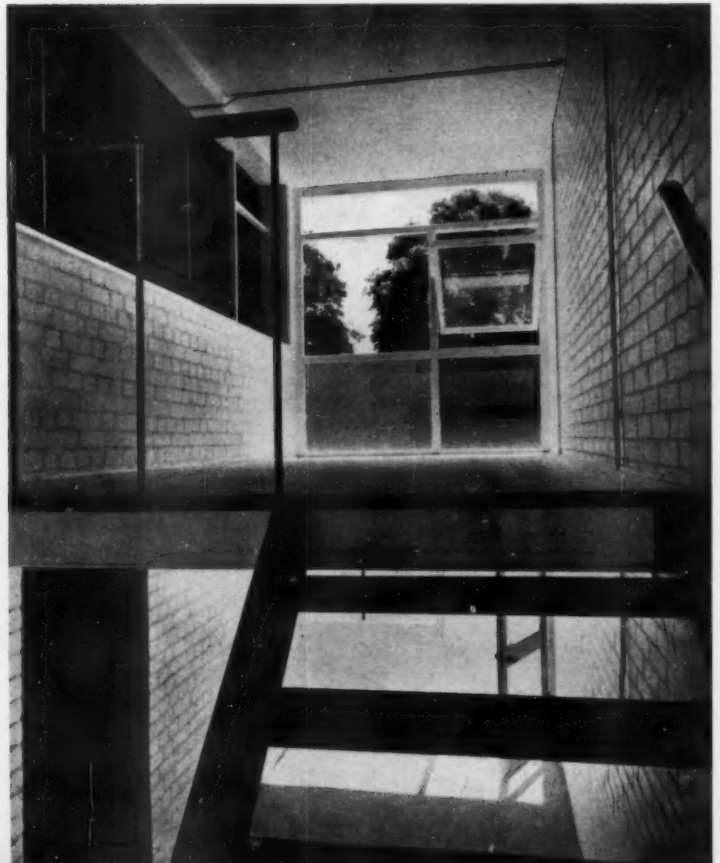
Ventilation louvres

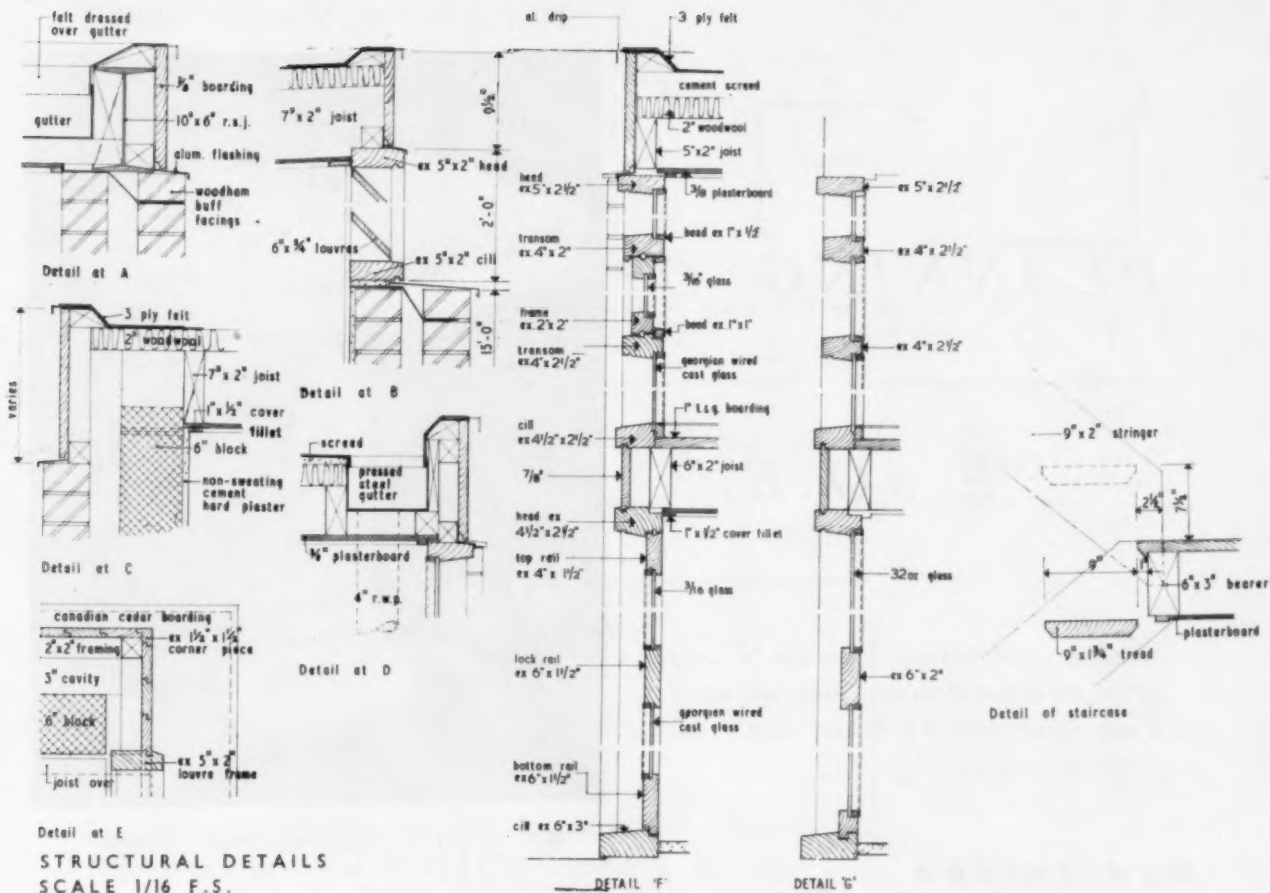
Stairs and gallery

Squash Court

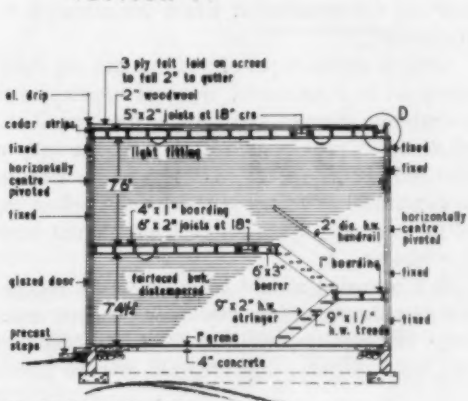
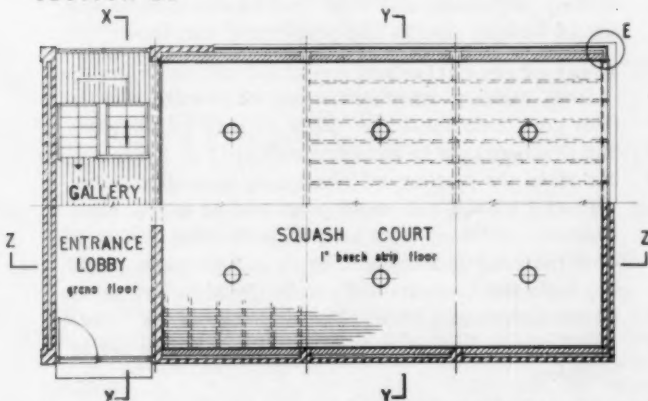
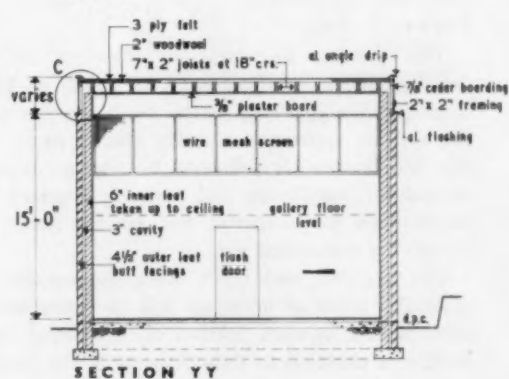
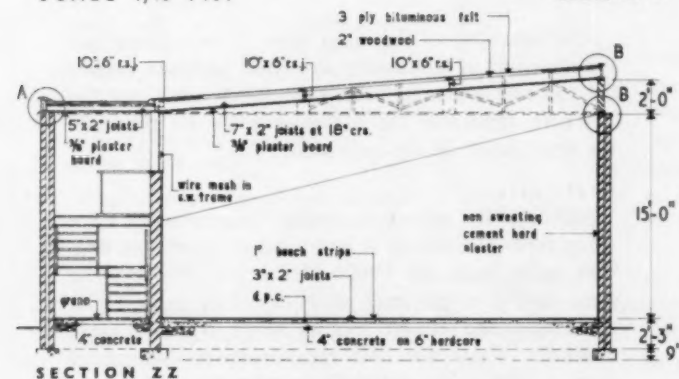


Other court will be built off this end wall





STRUCTURAL DETAILS
SCALE 1/16 F.S.



PLAN AT 15 FT LEVEL PLAN/SECTION SCALE: 1 IN = 12 FT SECTION XX

PLANNING

by

“E. & O. E.”

“Planning”, the Architects’ handbook is being revised, and certain of the new sections will appear in serial form in the A. & B. N. each month. This is the first article of the series.

Sanitation

Scope

This Section discusses the planning of sanitary accommodation applicable to all types of buildings. Consideration is first given to the basic dimensions of the various appliances and the special needs for use; this information is followed by the accommodation needed for installation and assembly together both in single units for domestic and similar needs and in groups for communal use.

The number and types of appliances for use in particular types of buildings will be given among the requirements in each Section of “Planning” thus this Section is confined to those aspects of the planning of sanitary accommodation which are common to all installations.

Only in certain types of building can any rules be laid down as to numbers of types of appliances thus frequently the planner must design for himself the extent of desirable provisions. It may be generally assumed that it is better to err on the generous side especially in communal buildings in which two appliances of each of the necessary types for each sex should normally be a minimum.

Full attention should be given to the proper screening of entrances of lavatories in schemes catering for large numbers, especially if there are peak periods of use, with adequate and properly planned circulations.



“Carlton” lavatory basin in vitreous china with “Sheerline” taps by Shanks & Co. Ltd.

The suitability of the many types of each fitting and the materials of which they are made although outside the scope of “Planning” needs careful thought.

Where applicable the examples given are based on the sizes shown, in the appropriate B.S.

Legislation

Although the extent of sanitary accommodation for many types of building is undefined in legislation, Byelaws made under the Public Health Act 1936 exercise some control of planning needs especially in regard to ventilation and cut-off lobbies while Byelaws made under the Water Act 1945 regulate certain features of sanitary appliances and their installation, such as the size of flushing cisterns and positions of overflows.

Frost Precautions

Since sanitary installations are very vulnerable to frost great care should be taken to plan supply pipes and drainage runs to minimize such risks and planning can make the greatest contribution to their elimination.

Placing of soil and waste pipes and of supply pipes internally and away from external walls eliminates most frost risks and is acceptable to most Authorities, while any extra first costs are likely to be quickly offset by reduced maintenance costs. The simplicity of the “one-pipe” system is often not only economic but an aid to planning.

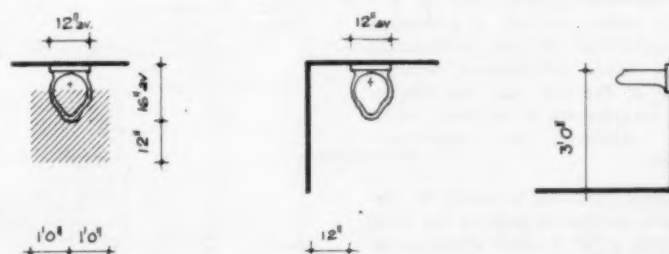
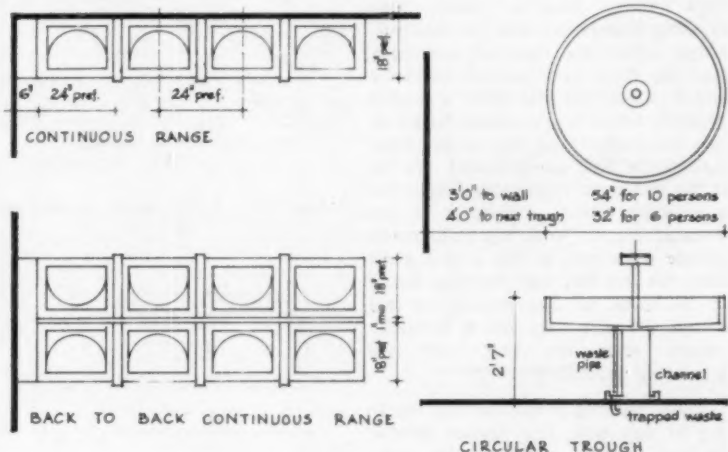
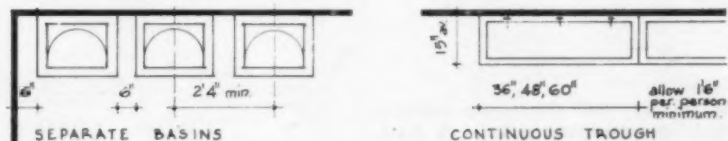
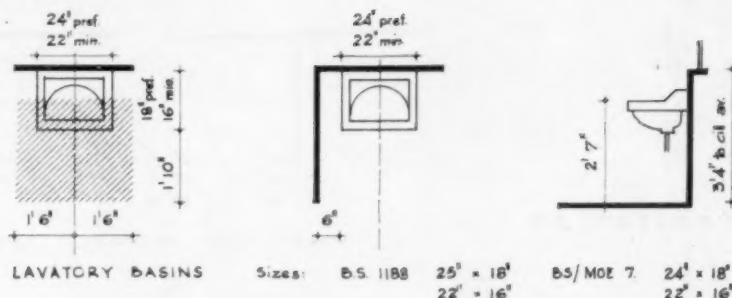
LAVATORY BASINS

The sizes and types of lavatory basins are innumerable and therefore in this section it is proposed to deal with those of average size only and of a few types. Where possible separate basins are preferred as only in this way can really adequate elbow room be given to each user, single basins should be placed 6in apart to allow for this and for cleaning. Lavatory basins fixed in corners do not normally allow this minimum elbow space.

When ranges of basins are used they should be slightly wider than for single units to allow for all the basins to be used at one time: ranges of basins need an allowance of 1in in front for overlaps. For economy of space troughs are the most efficient, these are mainly used in factories and are obtainable in narrow widths and in lengths suitable for three or more persons. There is also a circular trough with a central fitting incorporating several liquid or other soap fittings and water supply is carried overhead and dropped to each fitting, this is very economical of floor area as many persons can use one large trough at the same time.

The plumbing for a series of single or a range is usually similar and may be arranged in various ways; if the waste discharge is into an open channel no traps are needed, but for all other methods each basin must be trapped. The plumbing may be visible under the basins, or may be enclosed in various ways with panels, pedestals, etc., or the plumbing may be taken into a pipe duct behind the wall against which the basins are placed. If basins are not fixed against return walls and service pipes and wastes are to be cased-in, the shape of the basin-end should be carefully chosen, as it is difficult to make a neat finish of the return of the pipe casing with many types of rounded basin.

Water is supplied by hand-controlled taps to most lavatory basins, but where extreme cleanliness is important footpedal control or control from a central point is advantageous.



DRINKING FOUNTAINS

LAVATORY BASINS & DRINKING FOUNTAINS

DRINKING FOUNTAINS

It is important when choosing drinking fountains to ensure that the lips cannot touch the nozzle or that the waste water level is at any time higher than the nozzle.

SINKS

The sizes of sinks vary considerably, the sizes shown are those in most common use. Sinks are mainly made in one of three finishes, fireclay, enamelled metal or sheet or cast iron

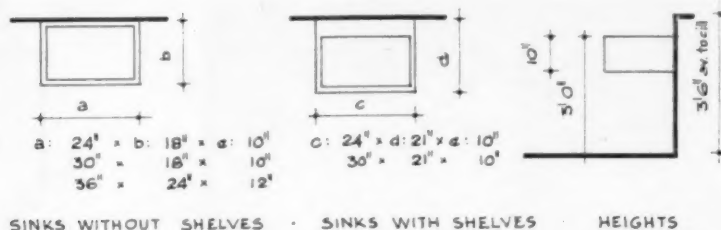
SIZES FROM BS/MOE 47

Sanitation

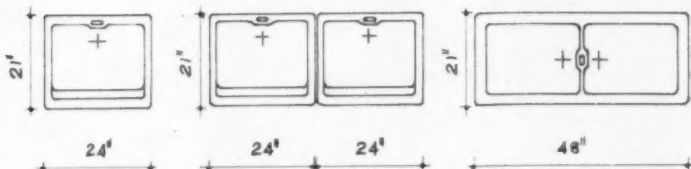
or stainless steel. Units are available with separate sinks, sinks with draining boards or draining board and work tops. Double sinks with draining boards can also be obtained. Large areas are required for both stacking dirty and washed crockery and it is essential that either a double draining board or a draining board on one side and a work top on the other side of the sink are provided. 1ft 9in is the minimum reasonable length for a draining board. Whilst it is not essential for the work top to be made in one piece with a sink it is a great asset for the sink and draining board to be made in one process as this avoids the dirt trap, which normally results when the two units are assembled separately.

Good lighting is essential for working at any sink, this applies equally to both natural and artificial light, care should be taken that the person working at the sink does not have to stand in their own light. Many housewives like to be able to look out of a window whilst working, if a window is provided over the sink, a minimum of 6in should be allowed between the top of the sink and the window where curtains are to be used, which would otherwise be continually splashed.

Cleaners sinks are available in fireclay with hardwood pads on the front and metal grills to avoid chipping the glaze when buckets are filled. Any sink, where buckets are to be filled, taps must be placed at least 16in above the bottom of the sink.



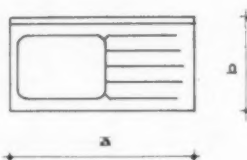
SINKS WITHOUT SHELVES · SINKS WITH SHELVES · HEIGHTS



These sinks and tubs are obtainable with a 3in. shelf, the dimensions remain the same.

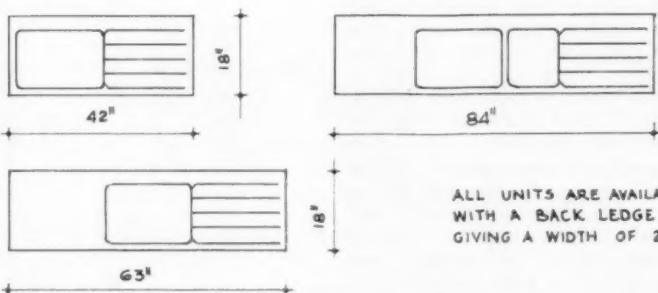


FIRECLAY TUBS AND COMBINED TUBS AND SINKS



a: 30" x b: 18" x depth 10"
36" x 18" x 10"
42" x 21" x 10"

FIRECLAY COMBINED SINKS AND DRAINING BOARDS



ALL UNITS ARE AVAILABLE WITH A BACK LEDGE GIVING A WIDTH OF 21in.

METAL SINKS WITH DRAINERS AND WORK TOPS

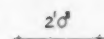
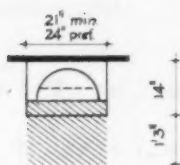
SINKS

URINALS

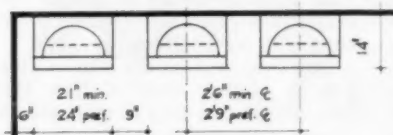
As with lavatory basins, there are very many types of urinals, varying

from the simple slate slab to very elaborate porcelain fittings. The type in most general use is the unit stall, which may be placed in long ranges

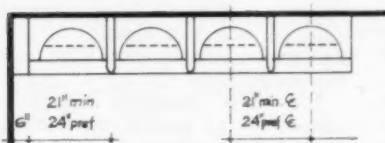
against a wall or partition; it is general to have a trap and separate flushing cistern to not more than every six stalls.



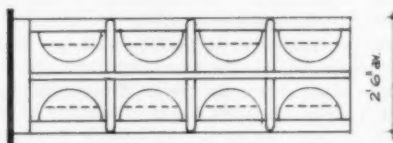
URINALS



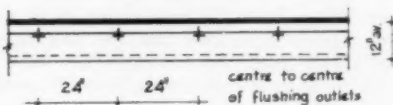
SEPARATE STALLS



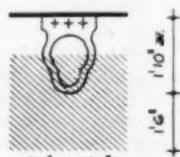
CONTINUOUS RANGE



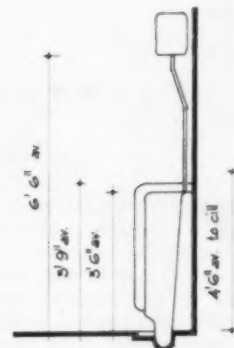
BACK TO BACK CONTINUOUS RANGE



CONTINUOUS SLAB



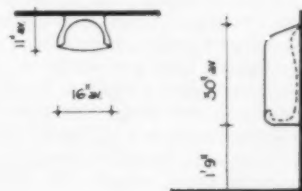
BIDETS



CORNER STALL



ISLAND URINAL



WALL HUNG URINAL

Urinals often present installation problems where suspended floors with exposed ceilings are used, owing to the thickness required for the channel and the trap which may amount to as much as 14in from the tread to the underside of the trap. The channel requires a slight fall ($\frac{1}{4}$ in per foot run) to the outlet. Outlets should serve not more than six stalls. Where floor thicknesses will not contain the channel and trap and the latter cannot be exposed below the ceiling of the floor under, a step is formed in the lavatory compartment. Such foot steps should not be more than 7in high nor should they be less than 4in; steps should be at least 12in wide and fall towards the channel and be so coloured that the difference in level is obvious. Where steps are not required the floor of the room should be drained into the channel of the urinal.

It is advantageous to provide an access screw-cap at the base of the trap and flush with the ceiling below, and this provision usually dictates the height of any necessary step.

Urinals placed against window walls in front of the windows are not generally liked and may often involve difficulties in placing the flushing cistern and flushing pipes, the former having to be placed at one side of the window opening. Above the actual height of the urinal fitting it is necessary to have sufficient space between the fitting itself and the window-sill for the flushing pipe and its necessary falls, for which should be allowed at least 6in, although this is dependent on the number of stalls which have

to be flushed from one tank placed at the side of the window. The window-sill height is also dependent on the position of the drainage in relation to the normal floor of the room.

BIDETS

The use of bidets is tending to increase in this country, but the local water authority should be consulted when considering an installation.

URINALS AND BIDETS

Preservation needs a Planned Policy

by M. E. TAYLOR, A.R.I.B.A., F.S.A. (Scot.).

PRESERVATION of buildings of architectural character is nigh a mockery in this country. Have you ever tried to interest the powers-that-be in the preservation of a small building which was in danger of being removed to make way for some scheme or was in danger of falling into disrepair? I have little doubt you will have given up in disgust at either the lack of interest or the time it has taken before the red tape has been unravelled. If an authority wishes to play the game of pass-to-you-please, there is no better example than an ancient building to use as the pawn in the game. The game may be played with two or more players, the greater the number the less likelihood of a successful conclusion. The players may be the local planning authority acting under the Town and Country Planning Act, and the Ministry of Works acting under the Ancient Monuments Code. To lengthen the procedure, bring in for guidance the Royal Commission on Ancient and Historical Monuments, The National Buildings Record, the National Trust, the Georgian Group, the Society for the Protection of Ancient Buildings, the Saltire Society, the Pilgrim Trust and Historical Buildings Council. If you have reason to believe that the works of art in your building are likely to be exported you must not forget that there is an additional player who, whilst standing at long stop, should be brought closer into the game, namely, the Board of Trade.

If you are not familiar with local government etiquette and by mischance address your request to the local council, who before the 1947 Planning Act "was" the planning authority but is now subservient to the County Council, no guarantee can be given on the outcome. The council may agree to your public-spirited suggestion so long as it is to be paid for by the County Council, or they may very well turn your proposal down flat, presuming that the County Council would entertain it.

Despite the frustrating rules, exceptionally good work has been done by a number of these players. But do they get the support from the general public and the local authorities that they deserve?

The first task is to make the general public interested in historic buildings, firstly in their own particular area and

thereafter the wider field of monuments in general. At the moment the majority of the general public could not care less. It is not their fault, it is a defect in our educational system. The schools could do much to remedy this defect but it must not be allowed to remain there.

Do local exhibitions attract the general public? Only if they feel they are going to get a bargain and an ancient monument is no bargain. The exhibition must therefore be taken to the masses. Has anyone taken an exhibition to a works or factory? If not, why not? The buildings exhibited must be local and depicted in three dimensions, photographs being most appropriate.

The same procedure should be adopted for all schools, the buildings illustrated being local in character so that they can be visited and explained to the children. If the buildings are associated with historical events all to the good.

The general public must be made aware of the treasures that are on their very doorstep. Once this has been achieved a greater interest in the preservation of our historic buildings will be taken. You cannot expect interest unless the man in the street is aware of their significance and value.

This is a matter for the planning authorities in the area concerned. They have the finance but in all too many cases they lack the enthusiasm and drive. All too often they leave it to someone else—such as the National Trust.

I have often wondered why some body (again the planning authority would be appropriate) does not try to persuade local industry to take an interest in one particular monument and pay for its preservation. If approached in the right way I am sure nothing but good would be achieved. I know of one industrialist who paid for the production of a book on ancient mills in his area, solely for the purpose of having a record before they all became extinct.

Obviously the first step is to shake the authorities out of their attitude of complacency. This must be done before it is too late, but by whom? Obviously the Minister responsible for planning—but with greater speed than he has shown in connection with the preparation of list of "buildings of special architectural or historic interest."

He should instruct local planning authorities to supply him, within a certain given period, with a report on their proposals for maintaining buildings which he has listed in Grade I, i.e. buildings of such importance that their destruction should in no cases be allowed. The question of increased grants for preservation, repairs and maintenance would need reviewing.

At the moment planning authorities are in the main content to accept the lists as supplied by the Minister and feel they have done their duty. The natural elements have no regard for lists and many buildings so listed will be no more in a short space of years because of this attitude.

The opposite, or rather positive, attitude has been taken by Kent County Council as planning authority. That authority has taken the attitude that the preservation of selected buildings of historic and architectural interest is a duty which this generation owes to future generations. The Council listed all the windmills in Kent and in 1949 gave consideration to the problem of safeguarding those windmills by means of making Building Preservation Orders. At a later date it was agreed that the most practicable policy would be to decide, in principle, that characteristic examples of post and smock mills should be preserved and that all available financial aid from general County funds should be allocated to these examples. Nine windmills were selected and contributions both for repair and maintenance annually were made. This is practical preservation and could well be followed by other County Councils.

The main difficulty in connection with preservation of buildings has been, in addition to public apathy, that of finance. How many local authorities have ever been asked to consider putting so much a year in their estimates for this purpose? If, for example, a County Council agreed to set aside a sum of a halfpenny a head of its population for this purpose it would be a start in overcoming this financial difficulty. Lancashire would set aside somewhere in the region of £10,000 per annum. Not a large sum but how much is being set aside now by County Councils? It would be advisable, before a suggestion of this nature was placed before a Council, that a report, similar to that prepared by Mr. James Adams,

the key



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Preservation

needs a

Planned Policy

County Planning Officer, regarding the windmills in Kent, be submitted so that the Council would have some object in view upon which they could visualise the money being spent.

An alternative method of financing the preservation and repair of old buildings was put forward by Lord Mottistone, F.R.I.B.A., in the House of Lords about two years ago. His suggestion was that there should be a tax of £1 in every £1000 spent on new buildings, the tax to be levied by local planning authorities. He estimated that the annual revenue would be in the region of £3 million. This is one solution if we could get rid of the word "tax", an unpopular word in the English language and if attached to planning authorities would bring back unhappy memories of Development Charges.

There is another factor which unfortunately is not considered, and that is the procuring of expert architectural advice and specialised craftsmen. As is all too evident, not every architect is qualified to care for old buildings and the craftsmen versed in the skilled techniques required are rare and becoming increasingly so yearly.

The R.I.B.A. could do much to alleviate the former defect by instituting a subject in the examinations on this side of an architect's work. This could form the groundwork for a course of specialised training for those interested, on the lines of the course at present held annually by the Society for the Protection of Ancient Buildings. There are many architects who are deeply interested in this side of their work but unfortunately have little opportunity to learn the art.

On the question of craftsmen, it is to be hoped that the Ancient Monuments Board will extend and develop their training courses for craftsmen, but at the same time not forget that in many areas there are local craftsmen who, with their local skill, could and would be of inestimable value if they could see that the craft was not to die out.

What is required is a planned policy for the preservation of ancient buildings and their surroundings, an enlightened attitude both as regards their moral and financial responsibilities by local authorities and a general awakening of public interest which are all too quickly disappearing as the years pass.

Tap Washers

OF all the items in a building, tap washers seem to involve more maintenance than any other but in spite of this fact their quality appears to receive only little attention from those concerned with the manufacture of taps and less still from those who replace washers. It may be that there is some tacit arrangement between tap makers and plumbers not to use too good a quality of washer to ensure continuation of employment for plumbers. All those of us who change our own washers, and today we must be a great proportion of householders, the poor quality and lack of endurance of washers is a time wasting nuisance, to overcome which I feel sure that most householders would willingly pay the small increase in price which a good washer of a more enduring quality might involve over those normally available.

Enquiries from shops, stores and builders' merchants seems to provide little assistance towards finding washers of materials which are even likely to last for a long time. One is offered a wide variety of types but in the majority of shops nothing is known about the lasting properties of what is offered. The durability of washers is a subject which I assume Research Stations, such as B.R.S., would regard as being of too little importance to justify the attention of their staffs, yet dripping taps must waste enormous quantities of water every day while reinstatement costs of damage resulting from the effects of frost must also be very great. There is no doubt that most of these dripping taps can be accounted for by poor quality washers as they need such constant replacement. Dripping taps, particularly on baths and basins, are the reason for, but not the actual cause of, the ugly stains that appear on the surface under the taps. These stains only appear when water is allowed to drip slowly and continuously on to the surface of the appliance and seldom result from the normal use of the appliance.

I have examined B.S.1010 which lays down a good quality for the normal screw-down type of tap and which is the document used as a basis of defining tap requirements in both the Model Water Byelaws and the local supply companies Regulations only to find the following wording "Washers for cold water taps and valves shall be of specially selected leather, rubber-asbestos composition, or other equally suitable material. Washers for hot water taps and valves should be of good quality fibre, rubber-asbestos composition or other equally suitable material". The standard sets down very full descriptions and dimensions for the metallic parts of these water taps and some of the parts are dimensioned so

precisely as to be described to three places of decimals, so that the wording used for the washers seems to provide a complete weakness in the standard. Such wording is quite valueless as a protection of the purchaser or the building owner or occupier as it virtually permits any washer to be used and thus destroys the efficiency which the issue of the B.S. is intended to provide. As an example of this weakness resulting from the loose wording, it may interest readers to know that of twelve taps installed in a new house completed only 14 months ago, already no less than five have had to be re-washed in this period and one of them has been re-washed twice, presumably on account of the poor quality of the replacement washer provided by the builder under the maintenance clause of his contract. All these taps comply with the requirements of B.S.1010 and were manufactured and sold by a very reputable manufacturer. It would seem imperative, therefore, that B.S.I. should ask its committee to include proper requirements for washers in this B.S.

The position in B.S.1212 for Portsmouth type ball valves is similar, as the requirements are "piston washers shall be made from suitable vulcanised hard rubber or other material which shall ensure equal performance of the ball valve". This clause in fact seems quite valueless since "suitable vulcanised hard rubber" is such a loose description that one is forced to enquire what is suitable, as no requirement is stated and in fact almost any vulcanised hard rubber could be provided (and probably is) and if any other material is used it only needs to have a performance equal to the worst of them. Judging by the result of enquiries among my friends there seems a general feeling that the average washer purchased today has a much shorter life than those which were normally available some 20 years or more ago. I have a feeling that washers sold in many shops and stores dealing in general merchandise have been chosen on the ground of providing a good profit margin rather than on the knowledge that they are really satisfactory for their purpose; it is only from builders' merchants specialising in spare parts for sanitary appliances that one can even expect suitability to be taken into account when the selection of what is to be offered is made.

I hope, however, that if B.S.I. takes the suggested action to include requirements for washers in B.S.1010 and B.S.1212 it will not confine its work to these specifications only, which provide for the washers for new taps, but that it will issue a B.S. for the quality of washers to which we may purchase the washers we need as

Tap Washers

replacements; further it would seem to be in the national interest, since water appears to be growing scarcer, if B.S.I. would, after the publication of a standard for washers, endeavour to persuade the builders and plumbers' merchants and also the stores who sell to the average householder, to stock and advertise that the washers they offer comply with the B.S., even if they are more costly.

The choice of materials available from which good washers can be made is quite large but as the result of talking to a number of tap suppliers and manufacturers I have recently been able to acquire some washers made of nylon which, I am told, lasted without sign of failure for an incredible number of cycles under a test of turning the tap on and off. In fact a figure of several million operations was quoted, which must, in my estimation, be equivalent to 20 or 30 years at least of use of a normal domestic kitchen tap. I have already installed certain of these washers and on the basis of this information when I have changed all those in my house I hope never to change a washer again in my lifetime. I am told that already some tap manufacturers are using these nylon washers in their products. I do not think, however, that nylon is necessarily the only material which would meet the requirements of a good quality and lasting tap washer but at present there is no recognised means of assessing what constitutes a good washer.

The only fault I have so far noticed with the nylon washers is that the ones I have are just a little bit too

hard and make opening and closing of the taps a little difficult, but this is a factor which I am sure could be overcome by a change in the selection of the quality of nylon used as I understand there are many hardneses available in this material. I have a type which combines the washer, washer plate and stem in one moulded piece but I gather plain washers are also available in this material for fixing to a normal washer plate, such as that shown in B.S.1010, by a normal washer nut.

While I think the nylon material is excellent for tap washers on both hot and cold services there are positions where washers are used in water installations in which I would be a little doubtful whether this material would necessarily be suitable, for example on stop valves which are only seldom operated and where leather seems to meet the conditions better than most of the materials that have been available and also on ballvalves, such as those to B.S.1212, where a softer material seems to be needed as the plunger washer only closes relatively lightly on the seating unlike a tap washer which is screwed down comparatively hard on to the seating. It does not seem an unreasonable assumption that if properly specified, washers, under normal conditions of use, could have a life equal to that of the weakest of the metallic parts and thus cease to be a maintenance problem. It is, of course, advantageous that, by a correct selection of materials, washers can be used for both hot and cold taps thus reducing the variety which need to be stocked.

This discussion on washers gives me an opportunity also to make a

comment on B.S.1010 which I have wanted to make for a long time. This is a very rigid specification which permits no latitude for development and necessitates the issue of frequent amendments to keep it in line with current production. I wonder, therefore, whether, perhaps as an alternative to B.S.1010, it might be possible to lay down a performance standard for water taps regardless of the type of operation and thus cover those now outside the scope of B.S.1010. I feel that the development of such a standard would not be an easy task more especially the development of the necessary tests to evaluate the performance as such tests might be very hard to evolve but with the assistance of water engineers and the B.R.S. I feel it should not be impossible if there were a willingness to take this action. The tests would of necessity take long to evolve and could be applied only to prototypes and at very occasional intervals during the production run thus the normal control of production would have to continue to be achieved by the gauging of parts to an agreed specification of the tested prototype. I have a feeling that the variety of types which might result from such a change might be unwelcome to water supply companies and to plumbers on the ground that their fitters would have to carry such large stocks of spare parts but I feel that many of these anticipated difficulties could be overcome if the dimensions of the main replacement parts, such as washers, were specified precisely in the same way as it would be necessary to specify rigidly the requirements for the connections to the supply pipes and sanitary fittings.

DUTCH UNCLE

Timber Notes

Little change in softwood prices can be expected over the remainder of this year. Official sales from the Government stock continue to be made slowly at prices on a par with those being paid for imported timbers this year, and the Russians have placed more lists covering 75,000 standards of redwood and whitewood for the remainder of the year at unchanged prices, though these offers will have to be taken up in the next couple of weeks to ensure shipment before ice closes the Russian ports. The fact that the Export agency has felt able to keep to the same prices suggests that the market has settled at the current prices.

Stocks of softwood have been running down quite rapidly throughout the year so far, but this was inevitable in view of the particularly heavy stock held at the start of the year and the quantities now arriving will send the stock holdings up again. It is expected that the softwood stock held by the importers will be in the region of

500,000 standards at the end of the year, which is quite an adequate total at a time of diminishing softwood sales in this country.

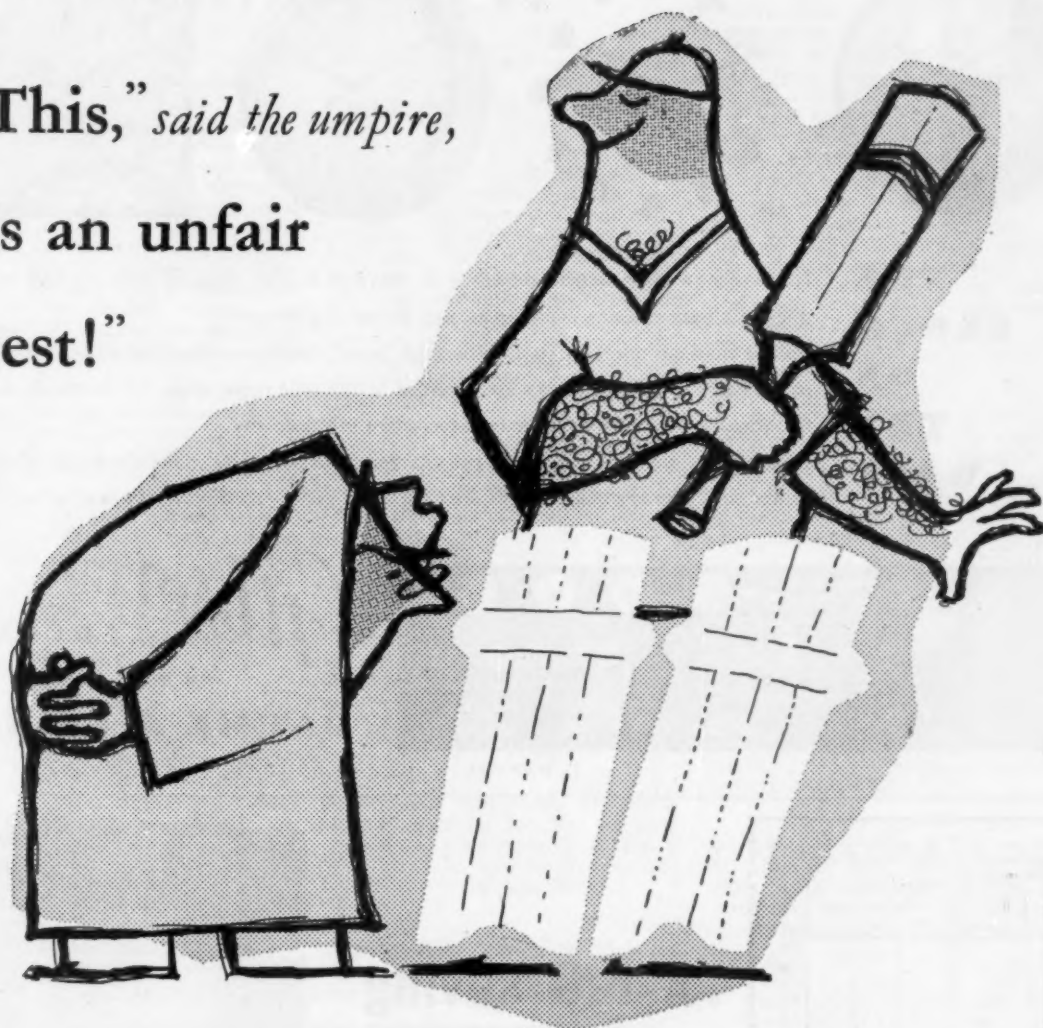
The response to the Government sale of 1,800,000 cu ft of hardwoods, mostly American oak, was much better than the reception given to the strategic softwood reserve sale. Tenders were received for most of the hardwood offered, but in some cases the prices did not reach the minimum at which the Board of Trade will part with the stock. Quite a good portion has now been sold, and negotiations are taking place to find an acceptable basis for dealing with those whose first offers were too low. There should not be much trouble disposing of the whole of this stock.

Ramin shipments to this country are to be drastically cut. The Sarawak Government has decided to limit exports to roughly half the quantity sold in 1955. At the same time there comes information that freight rates from the Far East—which includes such important hardwood supply countries as

Japan, Malaya, Sarawak and Siam—are to go up by 15 per cent. An increase of this magnitude cannot be absorbed by the shippers and importers, so selling prices here must be affected. The ramin control would also have the effect of pushing up prices, but this will not take place for a while, as there are good stocks of this wood available in the country at the moment. On the whole, hardwood prices continue to be low because of the slump in the furniture trade.

Plywood prices are again about a quarter cheaper than last year, the slight recovery early in July having been lost in later weeks. Government strategic plywood stocks are expected to be sold before the end of the summer, but the quantity is comparatively small and will have little effect upon market values, which are about as depressed as they can possibly become. It is difficult to imagine that plywood prices can go any lower than they stand at the moment. Few commodities in the building trade can show a reduction of 25 per cent. on 1955 prices.

"This," said the umpire,
"is an unfair
test!"



From the first ball of the season to the last, the pads that protect the cricketers of a Home Counties club would do credit to a soap-advertisement.

Yet they are whitened only once a year. Stains and ball marks wipe off time and time again. The secret is that someone has discovered yet another unofficial use for Pammastic.

The best Emulsion Paint in the world, Pammastic is not of course intended for cricket pads. But this successful misapplication — 'not out' after two seasons — demonstrates a point or two of importance: Pammastic is tough, long-standing and scrubbable, and can be used *outside* as well as in, on almost any surface.

Furthermore, it needs no primer or undercoat, and dries in an hour with a fine matt finish.

Additional information as to the properties of Pammastic — and its notable complementaries, Pammel (the luxury gloss finish), Pammelette (superfine Eggshell finish) and Pammatt (the superfine flat finish) — is available on request.

BLUNDELL PAINTS

BLUNDELL, SPENCE & CO. LTD., YORK HOUSE, 37 QUEEN SQUARE, LONDON, W.C.1



303



749



421

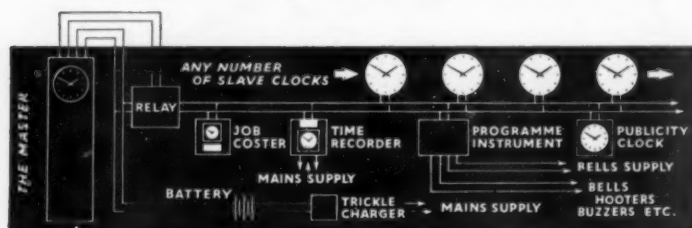


THE CLOCK ON THE WALL

No longer an afterthought, the clock on the wall is often planned with the wall itself, as integral a part of a new building as, say, its lighting system.

As one clock on one wall, or as a hundred 'Slave' clocks on a hundred walls, synchronized to a 'Master', Gibson clocks are specified at the blue print stage, for hospitals, schools, factories, or wherever accurate time-recording is a necessity.

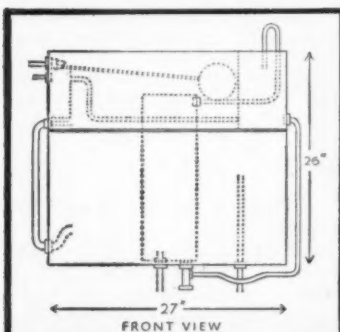
Because they are worked off batteries charged from the mains, these clocks are aloof from power cuts. The available designs are varied and good—special designs can be carried out.



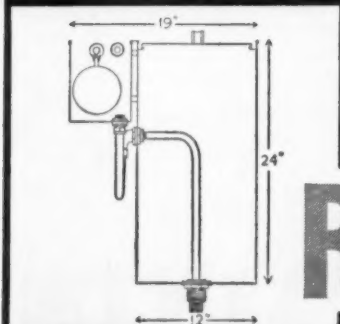
Gibson
CLOCKS
are made by—

BAUME & CO. LTD

1 HATTON GARDEN, LONDON, E.C.1. CHANCERY 4331



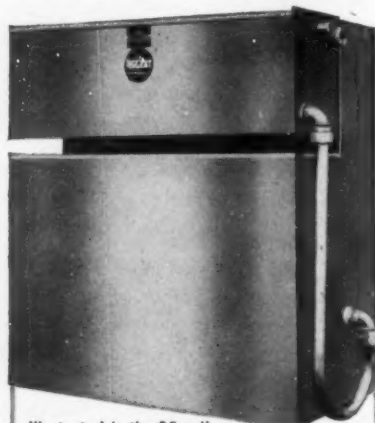
THE CALORIFIER



THE DURHAM

A BIG saving on installation costs

Rolyat tanks represent a saving all along the line, quite apart from the extra quality which is built into them. Special tanks are made for awkward situations at no extra cost, and an advisory service is at your command for any installation. They are specified by local authorities, Architects and Heating Engineers throughout the country.



Illustrated is the 25 gallon "Rolyat" recessed "Durham" tank. Please send me details of the range of "Rolyat" tanks.

NAME _____

ADDRESS _____

A/I

ROLYAT PATENT HOT WATER TANKS

THE ROLYAT TANK CO. LTD. CROMWELL RD. YORK

Industrial Notes

● A new booklet, "The Clean Air Act and you", has been published by Radiation Ltd. The object of the booklet is to assist the successful implementation of the Act which can only be achieved by a proper understanding of the terms and provisions of the Act and by full co-operation of Local authorities and the general public. The booklet is phrased in simple terms which make the workings of the Act readily understandable to the layman. Copies are available on request to Radiation Ltd., Stratford Place, London, W.1.

● The National Federation of Roofing Contractors announces that, as a result of their national training scheme, 105 employees of member firms have received specialised instruction in the fixing of asbestos cement, since September 1955. The scheme was fully supported by asbestos cement manufacturers who drew up the syllabus and supplied the instructors and demonstration materials. A further series of courses is being arranged for 1957.

● The Croydon Technical College, Department of Building, announces that courses in the improved techniques which have been developed in the use of sheet copper and super-purity aluminium will continue in the forthcoming session. Intending applicants in the London area should make early application to the Head

of Building Department, Croydon Technical College, Selhurst Road, South Norwood, S.E.25.

● Messrs. P. C. Henderson Ltd., makers of Henderson sliding door gear and light overhead runway tracks announce the publication of a new fully illustrated list O.R. devoted solely to Overhead Runways. Runway tracks are now often built in as a permanent feature in modern factories and blocks of offices for carrying mobile cradles for cleaning clerestory roof lights and glazed or glass walls.

● The Seventeenth National Conference for the Preservation of the Countryside will take place at Buxton, Derbyshire, from October 4th-6th, and will be opened by His Worship The Mayor of Buxton, Councillor E. Barson, J.P. The Headquarters of the Conference will be at the Spa Hotel, Buxton, and the meetings of the Conference will be held at the Playhouse Theatre. Further details are available from: The Secretary, C.P.R.E., 4 Hobart Place, London, S.W.1.

● Pegsons's Ltd. have secured a £200,000 contract for the complete crushing and screening plant for a new dam to be built by German and Indian contractors near Bombay.

● The Council of Industrial Design Scottish Committee is moving to new premises at 46, West George Street, Glasgow, at the beginning of September. There, when alterations are completed, improved facilities will enable visitors to make fuller use of the many services offered to the public, to industry and commerce and to education.

● Wm. Sanders & Co. (Wednesbury) Ltd. announce that, owing to increasing costs of labour and materials, they have been compelled to increase the prices of all gear manufactured by them by 5 per cent. dating from 8th August, 1956.

● British Insulated Callender's Cables Limited announce the appointment of Mr. G. F. Huddleston, Assoc. I.E.E., as Branch Manager, Brighton Office, in succession to Mr. R. E. Prickett, who has been appointed London Branch Manager.

● E. K. Cole Ltd. announce that the trading profit for the past year amounts to £773,733 after providing for all expenses but before deducting taxation. This represents an increase of £66,204 over the results obtained last year. The heating division increased its turnover by approximately one-third and the profit position increased considerably.

● Williams & Williams Ltd. show a net profit of £107,842 for the year ended April 30th which is £121,421 lower than last year. The dividend remains unaltered at 12½ per cent.

● The General Electric Co. Ltd. announce the net profit of the Group for the year ended March 31, 1956 as £2,759,417 as compared with the figure of £3,452,546 for the previous twelve months. The difference is attributed to rising costs, reduced profit margins and difficult trading conditions in certain consumer goods. Sales figures have reached a new record but cash and bank balances have fallen sharply from £7,150,352 to £1,373,435.

● Sheepbridge Engineering Co. Ltd. is raising its dividend from 17½ per cent. to 22½ per cent. for year ended March 31st with a final of 17½ per cent. Net profit has increased from £275,392 to £495,577.

● Thomas French & Sons Ltd. have moved from their London Office at 156 Oxford Street to new and more convenient premises at Dundas House, St. James' Street, S.W.1.

A 24 in storm water trench, 6 ft deep, being cut under railway culvert (with only 4 ft clearance) by Warner & Swasey Co's Gradall machine, distributed by Blackwood Hodge. The Gradall has a 24 ft telescopic boom.



NEW PRODUCTS



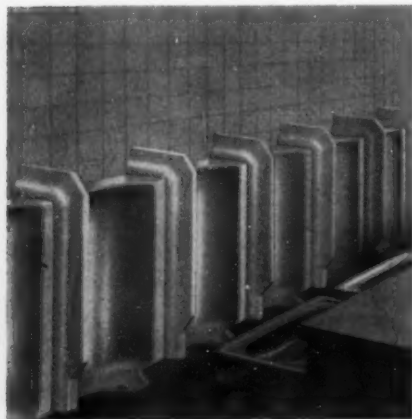
The Yale & Towne Manufacturing Co. announce the introduction of two new lines. No. L.310, Fig. 1, is an inside door mortice lockset with two plates and lever handles and a 2-lever lock. The other newcomer is No. 3101 mortice furniture (latch or lock) and both articles are zinc alloy pressure cast with patent spring loaded handles. Obtainable in various finishes.

★

No. 516 Stall urinal range, Fig. 2, by Johnson Fireclay Co. Ltd., comprises stalls with lipped bases and separate outlets and 6in facings to floor. Stalls are 3ft 6in high overall x 24in wide. Can be supplied with concealed or open pipes and as a single stall if required.

★

The type "b" cantilever bus shelter by Henry Hope & Sons Ltd., has recently been approved by the C.O.I.D. It can be constructed to any required length from standard 12ft long units. The cantilevered roof (at a height to give minimum headroom of 6ft 10in) projects 5ft across the pavement, slop-



2

ing upwards from the single supporting fascia. The shelter is designed for queues standing two abreast.

★

The Euclid model S-7 tractor and scraper, Fig. 3, is the latest addition to the range of equipment produced at the Scottish works of Euclid (Great Britain) Ltd. It has a struck measure capacity of 7 cu. yd. or 8 and 9 cu yds. heaped 3:1 or 1:1 slope respectively. It has a 147 h.p. Leyland diesel engine and heavy-duty 16.25in dia. clutch. Top road speed 24 m.p.h. Distributed by Blackwood Hodge, the machine has hydraulic control for all scraper movements.

★

The new No. 88 Orbital Sander Fig. 4, by Black & Decker Ltd., will have its first public showing at the forthcoming Building Plant Exhibition at Newcastle. It has a platen size of 11in x 4½in making 5,000 orbits per minute.

★

The Evans filter, Fig. 5, is designed to prevent grit, etc., from damaging valves. It is a simple closed in filter of fine wire gauze which when inserted into an adaptor will not impede the water flow. It is important when connecting up that the unit is fitted so that the closed end of the filter is facing the flow as illustrated. The adaptor must be screwed up tightly so that a seal is made between the shoulder of the adaptor and the filter flange. In the case of B.S. 1111 and 1212 ball valves the filter can be fitted directly into the valve.

★

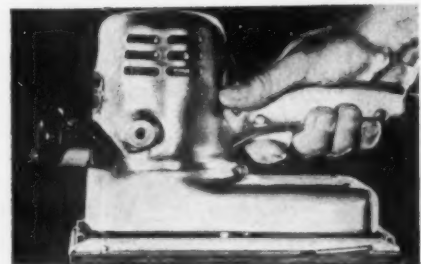
Chamberlain Industries Ltd., are now the sole agents in this country of the Austrian built "Jenback" diesel driven welding generators, Fig. 6. Developed for workshop use as well as repair work away from a fixed workshop the generators are independent of electric mains.

★

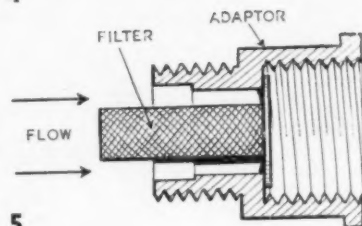
Calders Limited, announce the introduction of Alufloor prefabricated wood panels, Fig. 7. It is prefabricated on to an aluminium backing in 18in panels and has the appearance of parquetry and a wearing surface of either 1in long or strip flooring produced from the same specie of timber. The panels are applied directly by use of a special adhesive to either a concrete or wooden sub-floor. Available in oak, birch, maple, teak, abura, sapele, African mahogany, nuhuhu and Rhodesian teak.



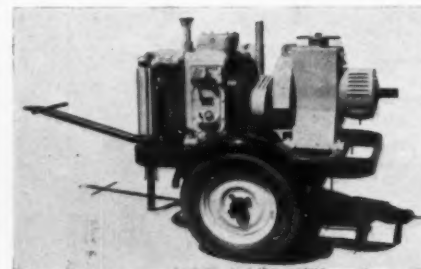
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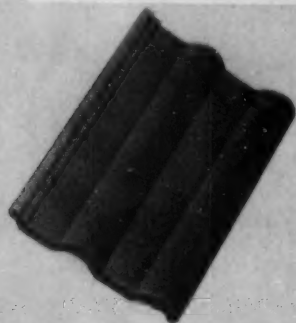
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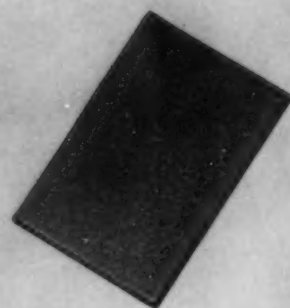
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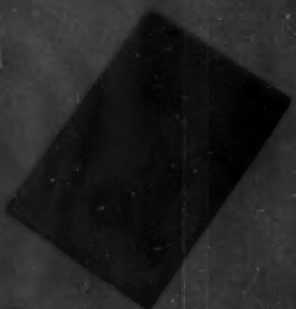
YEOMAN LIGHT RED · 6½" × 13"
approx. weight of tiling 1000 lbs. per sq.



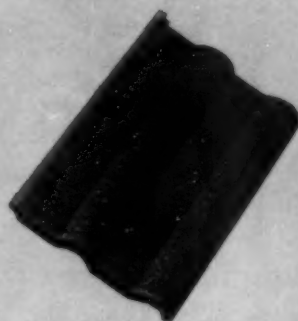
LUDLOW ANTIQUE · 15" × 9"
approx. weight of tiling 900 lbs. per sq.



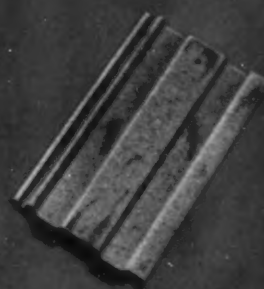
PLAIN FULL GREEN · 10½" × 6½"
approx. weight of tiling 2000 lbs. per sq.



PLAIN DARK RED · 10½" × 6½"
approx. weight of tiling 2000 lbs. per sq.



YEOMAN BROWNSTONE · 16½" × 13"
approx. weight of tiling 1000 lbs. per sq.



LUDLOW COTSWOLD GREY · 15" × 9"
approx. weight of tiling 900 lbs. per sq.

MARLEY offer the widest selection of roof tiles in the world in five main types — PLAIN TILES, ANGLIA, YEOMAN, LUDLOW and WESTWOLD.

All Marley Roof Tiles are covered by the Marley dual guarantee:

- A. That Marley Tiles will not laminate or decay for 50 years.
- B. When fixed by Marley craftsmen, they will be maintained free for 10 years.

MARLEY



"Not for an age—but for all time"

The Marley Tile Company Ltd. Sevenoaks, Kent. Sevenoaks 55255.



WESTWOLD SEA GREEN · 10½" × 6½"
approx. weight of tiling 2000 lbs. per sq.



ANGLIA BRICK RED · 15" × 9"
approx. weight of tiling 900 lbs. per sq.



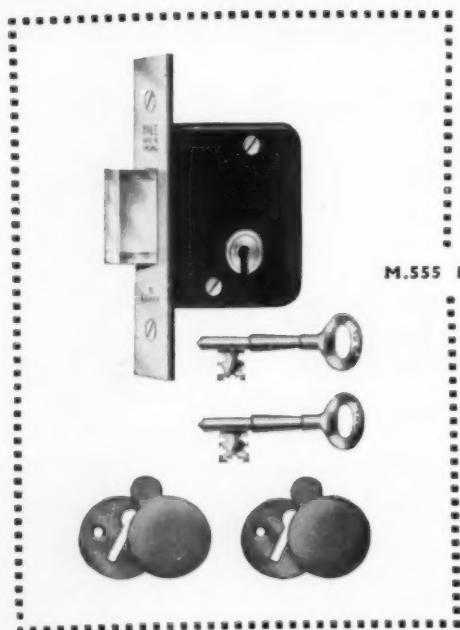
ANGLIA DARK GREEN · 15" × 9"
approx. weight of tiling 900 lbs. per sq.

All weights are based on normal gauge for the type of tiling mentioned

Free House!



It wasn't supposed to be an invitation. The trouble is so many old locks do no more than just keep the door closed (and sometimes not even that) whilst real security measures are non-existent. The safest course if you value your property is to re-equip all important doors inside and out with the world's most reliable locks — YALE. There are YALE locks and padlocks to meet every security risk. Here is an example:



M.555 LEVER MORTICE DEADLOCK

The latest lock for keeping out the uninvited 'guest' from lock-up premises. Designed to meet insurance requirements, it is a 5-lever deadlock operable by key from both sides. Differs are obtainable on levers only and not by use of wards, making it extremely difficult to pick. Its steel reinforced deadbolt and 10" steel striking plate make it almost impossible to force. Available ex stock; literature on request.

Where there's a door there's a need for



2" X 1 1/2" HARDWOOD

HANDRAIL

CONTINUOUS
FLAT WELDED TO
BALUSTER

3/8" ROD BALUSTER

R.C. CARRIAGE

HARDWOOD TREADS

2 3/4" X 1 1/2" PLATE
WELDED TO BALUSTER
& SCREWED TO
UPSTAND

R.C. CARRIAGE
SUPPORT

HANDRAIL TURNED
UNDER &
SCREWED TO 1ST TREAD

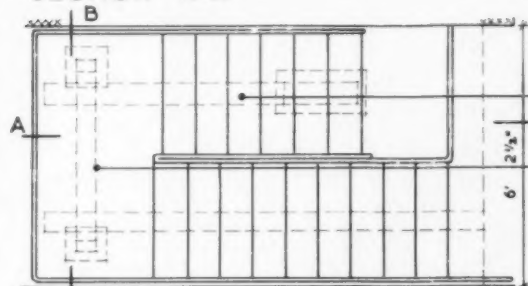
CHEESE NUT WITH
SCREWDRIVER SLOT
FIXED TO THREADED
ROD BALUSTER

DETAIL OF BALUSTER

• 1/2 F.S.

SECTION A-A

SECTION B-B



R.C. CARRIAGE

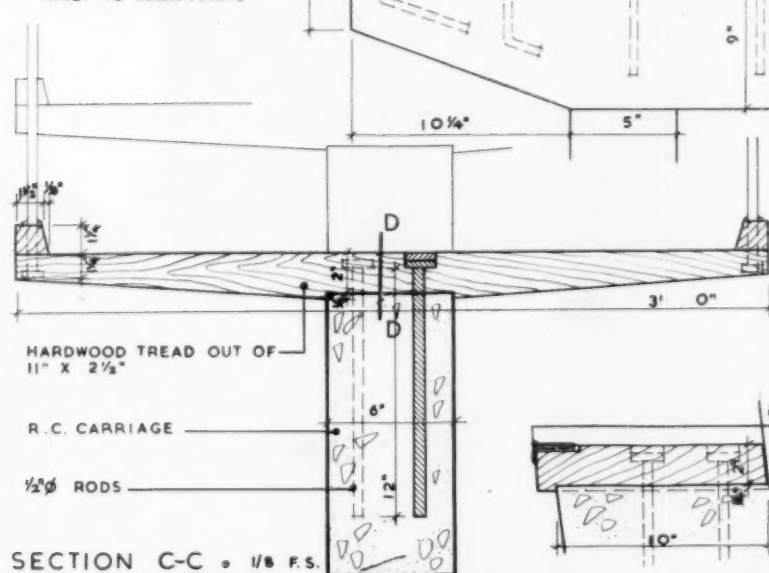
R.C. CARRIAGE SUPPORT

PLAN • 1/4" - 1' 0"

3/8" ROD BALUSTER

1 1/2" X 1 1/4" HARDWOOD UPSTAND

1/2" Ø CHEESE NUT WITH
SCREWDRIVER SLOT FIXED TO 1/2"
THREADED RODS SET IN R.C.
CARRIAGE. HARDWOOD DOWEL
INSET TO MASK FIXING



HARDWOOD TREAD CUT OF
11" X 2 1/2"

R.C. CARRIAGE

1/2" Ø RODS

R.C. CARRIAGE

ALUMINIUM & RUBBER
NOSING

LANDING DETAIL

• 1/8 F.S.

SECTION C-C • 1/8 F.S.

SECTION D-D • 1/8 F.S.



STAIRCASE, ADMIN. BLOCK, FACTORY, SHEFFIELD
ARCHITECT: A. M. GEAR



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Catalogues and further information relating to Manufacturer's and Specialist's advertisements in this issue will be forwarded if you fill in the names and page numbers on the reply paid postcards below.

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THE ARCHITECT & BUILDING NEWS
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STAMFORD STREET,
LONDON, S.E.1.



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Advertiser's name only Page No. Advertiser's name only. Page No.

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DATE OF ISSUE 16 AUGUST, 1956

Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the

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OPEN

BUILDING

BLACKBURN B.C. (a) New County Mixed Secondary School for 510 Pupils at Shadsworth. (b) Borough Engineer, Town Hall. (c) £2.2.6d. (d) August 17.

BLETCHLEY U.C. (a) Erection of 26 bungalows and 16 houses with garages on the Water Eaton estate. (b) J. F. Smithie, M.I.Mun.E., Engineer and Surveyor, Council Offices, Bletchley. (c) £5. (e) September 4.

BOURNEMOUTH B.C. (a) Erection of a ladies' convenience at Leslie Road. (b) Borough Architect (Room 106), Town Hall. (c) 2gns. (e) August 25, to A. Lindsay Clegg, Town Clerk.

BRADFORD, YORKS. (a) Conversion of Stocks Lane Sunday School into a three-classroom school, for City Council. Documents from the City Architect's Office, Town Hall, Bradford, 1. (e) August 27.

BRIGHTON B.C. (a) Erection of a block of 18 flats Norwich Drive, Lower Bevendean Estate. (b) The Borough Surveyor, Engineer and Planning Officer, 26-30, King's Road, Brighton. (c) 2gns. (e) August 28.

BRISTOL C.C. (a) Erection of Bowls Pavilion, changing accommodation, public conveniences and park shelter at King's Head Lane Recreation Ground, Bishopsworth. (b) J. Nelson Meredith, F.R.I.B.A., City Architect, The Council House, College Green, Bristol, 1. (c) 2gns. (d) August 17.

EBBW VALE U.C. (a) (1) Erection of pair of traditional houses at Beaufort Welfare Ground. (2) Erection of one house at Cwm Welfare Ground. (b) J. Leslie Thomas, L.R.I.B.A., A.R.I.C.S., Architect to the Council, Council Offices. (c) 2gns. (e) August 24, to Howard J. Williams, Clerk of the Council, Council Offices, The Walk, Ebbw Vale.

EPSOM AND EWELL B.C. (a) Proposed public conveniences—Car Park, No. 1, High Street, Epsom. (b) Norman Auty, M.Inst.C.E., Borough Engineer and Surveyor, Town Hall. (c) 3gns. (e) August 27.

EPSOM AND EWELL B.C. (a) Proposed changing rooms at Alexandra Recreation Ground. (b) Norman Auty, M.Inst.C.E., Borough Engineer and Surveyor, Town Hall. (c) 2gns. (e) August 27.

GATESHEAD B.C. (a) Alterations and additions to Fountain View Old People's Home. Includes construction of new second floor with area about 2,300 sq ft and about 27ft above ground level. (b) Spence & Price, Architects, 26,

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.

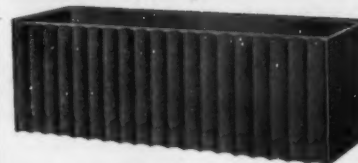
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St. Mary's Place, Newcastle upon Tyne, 1. (c) 2gns. (e) August 31.

HAMPSHIRE C.C. (a) Erection of the following Junior schools, mainly in traditional construction, of similar design, each having a floor area of approximately 13,000 sq ft. Bishopstoke, Cowplain, Crofton. (b) The County Architect, The Castle, Winchester. (d) August 30.

HAVANT AND WATERLOO, HANTS. U.C. (a) One block of 20 old people's flats at Victoria Road, Emsworth. (b) The Engineer, 1 Park Road, North, Havant. (e) August 27.

HERNE BAY U.C. (a) Erection of six pairs of semi-detached houses in Fitzgerald Avenue. (b) The Engineer and Surveyor, Mr. W. W. Smith, M.I.Mun.E., Council Offices. (e) September 10.

HEREFORD C.C. (a) Green Lanes Estate—Erection of 114 three-bedroom houses. (b) The Building and Maintenance Officer, Town Hall. (c) 3gns. (e) August 27.

HOWDEN YORKS, R.C. (a) Erection of six old people's dwellings in one block at Applegate, Howden, near Goole, for R.D.C. (b) G. L. Thompson, 22, Park Street, Selby. (c) 2gns. (e) August 30.

HUNTINGDONSHIRE C.C. (a) Erection of three additional classrooms, stores, cloaks and lavatories at Stan-ground C.P. School. (b) S. M. Holloway, County Architect, County Buildings, Huntingdon. (e) September 4.

ISLE OF WIGHT R.C. (a) The erection of six houses at Lower Furlongs, Brading. (b) Messrs. E. L. Smith and Son, Office of the Architects. (c) 2gns. (e) September 3.

LEAMINGTON SPA ROYAL BOROUGH. (a) Erection of 22 flats, 7 houses and 6 bungalows at the corner of Techbrook Road and Kingsway. (b) Council's architects, Messrs. C. F. Redgrave and Partners, 6, The Quadrant, Coventry. (c) 2gns. (d) August 17.

LOFTUS U.C. (a) Martin Row Housing Site—Liverton Mines, Erection of 24 flats on the above site including minor roadworks and sewers. (b) In writing, C. D. Taylor, L.R.I.B.A., 41, Baxtergate, Whitby. (c) 3gns. (d) August 21. (e) September 10.

LONDON, WANDSWORTH B.C. (a) Fifteen dwellings in two and three-storey blocks at Saxby Street, Brixton Hill, S.W.2, for B.C. (b) R. H. Jerman, Town Clerk, Municipal Buildings, with details of experience, plant and technical and supervisory staff available, together with the names of two technical and two financial referees. (d) August 29. Plans seen at the office of the architect, Harold Bailey, 47, Whitehall, S.W.1.

LONG EATON U.C. (a) Erection of 174 dwellings (132 houses and 42 bungalows) at Draycott Road, Sawley. (b) Francis Turner, Engineer and Surveyor, Town Hall. (c) 5gns. (e) September 3.

LUTON B.C. (a) Supply and erection of Shop Fronts, Block of Four Shops

and Flats, Yeovil Road. (b) Borough Architect, Town Hall. (c) 2gns. payable to Luton Corporation. (e) September 10.

NEWARK-ON-TRENT, NOTTS B.C. (a) Alterations and repairs to Northgate House. (b) Borough Surveyor, Municipal Buildings. (c) 2gns. (e) September 3.

NORTH COTSWOLD R.C. (a) Erection of six traditional houses (Reconstructed Stone) at Blockley (Springfield Estate). (b) F. Nettleton, Clerk of the Council, Council Offices, Moreton-in-Marsh, Glos. (c) 2gns. (d) August 25.

NEWCASTLE REGIONAL HOSPITAL BOARD. (a) First major phase of Con-

struction of New East Cumberland Hospital. (1) A single-storey ward block for 60 geriatric patients, (2) a single-storey ward block and treatment centre for 16 psychiatric patients, (3) a 20-bed cubicle block for infectious diseases, (4) the first wing (55 bedrooms and ancillary accommodation) of the Nurses' Home, (5) a group of ten small flats for senior nursing staff, (6) three detached houses for married medical staff and (7) a boiler house, laundry, mortuary and maintenance workshops block for the ultimate 440-bed hospital. (b) The Regional Architect, Newcastle Regional Hospital Board, Walker Gate Hospital, Benfield Road, Newcastle

upon Tyne, 6, with details of experience, facilities and command of labour necessary for carrying out this work with due despatch. (d) August 31.

NORTHERN IRELAND: BALLYMENA, ANTRIM R.C. (a) Forty-two houses and the construction of site works at Gracehill for R.D.C. (b) Ogilby and McCutcheon, 5, Lombard Street, Belfast, or E. Holinger, Clerk of Council, Rural Council Offices, Cushendall Road, Ballymena. (c) 5gns. (e) September 1.

NORTHERN IRELAND—BELFAST C.C. (a) Extension to Graymount Girls' Intermediate School. The work will consist of steel-framed extension buildings in traditional construction of double and single storeys, alterations to buildings, and the formation of playing fields, etc. (b) Architect's Department, 40, Academy Street. (c) £5. (e) September 6.

NORTHERN IRELAND, OMAGH. (b) The construction of a Voluntary Intermediate School for Boys (360) at Kevlin Road. (b) W. H. McEvoy, 73, May Street. (c) £5. (e) September 11.

PETERLEE DEVELOPMENT CORPORATION. (a) Acre Rigg 111 Development 49 dwellings scheme. (b) A. V. Williams, General Manager, Shotton Hall, Castle Eden, Co. Durham. (c) 2gns. (e) September 3.

PEWSEY (WILTS) R.C. (a) Ten traditional houses at Netheravon for R.D.C. (b) Engineer and Surveyor, Council Offices. (c) 2gns. (e) September 17.

PORTLAND U.C. (a) Erection of 20 houses on Verne Common Estate. (b) The Engineer and Surveyor, Council Offices. (c) 1gn. (e) September 3.

POTTERS BAR U.C. (a) External redecoration of 42 houses in Mutton Lane. (b) Engineer and Surveyor, Wylyotts Manor, Darkes Lane. (c) 1gn. (e) August 29.

ST. AUSTELL U.C. (a) 20 traditional dwellings (flats and houses) at Eastbourne Housing Site, 6 Traditional dwellings (Bungalows), Poltair Housing Site. (b) H. G. King, Esq., Engineer and Surveyor, Municipal Offices. (c) 2gns. (e) September 8.

SCOTLAND—LOTHIANS AND PEEBLES. (a) Erection of subdivisional headquarters and two blocks of two four-apartment houses at Bathgate, West Lothian, for Joint Police Committee. Excavator; mason; brick and concrete; carpenter and joiner; glazier; plumber; plaster and cement; terrazzo, floor finishes; roof tiler and rough-cast; bituminous felt roofing; painter and electrical. (b) T. Bowhill Gibson and Laing, architects, 6, Manor Place, Edinburgh. (c) 2gns. (e) August 27.

SHEFFIELD REGIONAL HOSPITAL BOARD. (a) Building Contractors are invited to apply for inclusion on the Board's list of building contractors in either or both of the following categories: (1) works up to £10,000 in value, (2) works of £10,000 to £100,000 in value. The Board's area covers South Yorkshire, Lincolnshire, Leicestershire,

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Nottinghamshire and the greater part of Derbyshire and Rutland. (b) Regional Architect, Sheffield Regional Hospital Board, Fulwood House, Old Fulwood Road, Sheffield, 1.

SOUTHAMPTON B.C. (a) Tenders for Contract B.267, Thornhill Estate, 4-storey flats, No. 84; Contract B.277, Thornhill Estate, 4-storey flats, No. 56; B.278, Thornhill Estate, 2-storey house, No. 115; B.279, Thornhill Estate, 2-storey house, No. 82; B.281, Thornhill Estate, 2-storey flats, No. 26; B.283, Thornhill Estate, Doctor's House, No. 1; B.276, Hollybrook Estate, 4-storey flat, No. 112; B.227, Earls Road Estate, 2-storey flat, No. 4; B.234, Cedar Road, 2-storey flat, No. 4; B.222, Weston Farm Estate, old people's homes, No. 33; B.200, Bassett Green Estate, Shop and Flats, No. 7; (b) Borough Engineer, Civic Centre. (d) August 24.

SOUTHEND-ON-SEA B.C. (a) One hundred and ninety-five dwellings and works incidental thereto at site 15, Blyth Avenue, Shoeburyness, as follows, for T.C.: six three-storey blocks of 45 flats; three three-storey blocks of 21 flats and maisonettes; 28 two-storey blocks, comprising 129 one-two-three and four-bedroom houses and flats. (b) Borough Architect, 30 Alexandra Street. (c) £2. (e) September 12.

SOUTH KESTIVEN R.C. (a) Erection of three pairs of permanent traditional bungalows at the end of The Broadway, Morton, near Bourne. (b) Council's Architect, Mr. H. Parsons, A.R.I.B.A., 41, North Street, Bourne, Lincs. (2) 2gns. (e) August 30.

SOUTHPORT C.C. (a) The Council invite Tenders for the erection of six shops with living accommodation and outbuildings on the Radnor Drive Housing Site. (b) Borough Architect and Town Planning Officer's Department, 99-105, Lord Street. (c) 2gns. (d) August 18. (e) September 14.

SUTTON-IN-ASHFIELD (NOTTS) U.C. (a) Improvements external works, and general repairs to six houses in Thornton Street for U.D.C. (b) Warner and Dean, architects, Mansfield Road. (c) 2gns. (d) August 13. (e) September 10.

EAST RIDING OF YORKSHIRE C.C. (1) Extensions and Internal Alterations at the Bridlington High School for Girls, (2) Erection of additional Kitchen at the Agricultural Institute, Bishop Burton. (b) County Architect, County Hall, Beverley. (c) £2. (e) August 27 for (1) and September 3 for (2).

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

ST. PANCRAS B.C. (1) 44 flats, six houses. (2) Camden Square. (3) Rowley Bros. Ltd., Dunloe Avenue, Tottenham, N.17. (4) £123,414.

LANCASHIRE C.C. (1) Erection of St. Augustine's R.C. secondary school.

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PONTEFRAC T B.C. (1) 72 flats, 28 maisonettes. (2) Horsefair. (3) W. Horner and Son (Contractors) Ltd., 23, Northgate, Pontefract. (4) £202,009.

DEPTFORD B.C. (1) Two blocks of 40 flats. (2) Harefield Road. (3) Herbert Richardson and Son Ltd., Slade Green, Erith, Kent. (4) £105,641.

WORSLEY U.D.C. (1) 223 dwellings. (2) Little Hulton neighbourhood unit. (3) Roy and Partners Ltd., 64, Blackfriars Road, Salford, 3. (4) £350,000.

WEDNESFIELD U.D.C. (1) 100 dwellings. (2) Ashmore Park Estate. (3) Lewes Bros. (Wednesfield) Ltd., Blackhalve Lane, Wednesfield, Staffs. (4) £117,453.

LIVERPOOL CITY COUNCIL. (1) Bus garage. (2) Gill Moss. (3) John Mc. Geoch and Sons Ltd., Arbour Lane, Kirkby Industrial Estate, Liverpool. (4) £339,962. (1) Erection of Rose Lane secondary school. (3) C. J. Doyle and Sons Ltd., R.C. Cathedral site, Liverpool. (4) £44,862.

CARDIFF CITY COUNCIL. (1) Main building contract. (2) Empire Pool. (3) Davies, Middleton and Davies Ltd., Phoenix Works, Caerphilly Road, Cardiff. (4) £440,722.

KENT C.C. (1) Secondary school. (2) Tonbridge North. (3) J. C. Elkington Ltd., 14, Avebury Avenue, Tonbridge. (4) £105,000. (1) Cage Green junior school. (2) Tonbridge. (3) W. Smith (Public Works) Ltd., Sevenoaks, Kent. (4) £50,330. (1) Technical school. (2) Royal Tunbridge Wells. (3) R. Corben and Sons, West Borough, Maidstone. (4) £94,000.

OXFORD UNIVERSITY CHEST. (1) Erection of North-South gallery. (2) Ashmolean Museum. (3) Hinkins and Frewin Ltd., Cranham Street, Oxford.

NORTH SHIELDS. (1) Offices. (2) Clive Street, for National Union of Seamen. (3) R. Jordan, Back Alexander Road, North Shields.

CHESHIRE C.C. (1) Secondary school. (2) Gainsborough Street. (3) Cooper Bros. and John Clayton Ltd., Catherine Street, Macclesfield.

BRIGHTON. (1) Block of offices for Twentieth Century Banking Corporation Ltd., Brighton. (2) Dyke Road. (3) Rice and Son Ltd., 23 Gloucester Place, Brighton.

HUNTINGDON C.C. (1) Erection of primary school. (2) Brampton. (3) Singfield Construction Ltd., St. Ives, Huntingdon.

SURREY C.C. (1) School. (2) Chobham. (3) Greenaway and Son Ltd., 265, Lordship Lane, London, S.E.22.

BATH CITY COUNCIL. (1) 42 dwellings, eight shops. (2) Foxhill Estate. (3) T. F. Brain and Co., 26, Queen Square, Bath. (4) £81,170.

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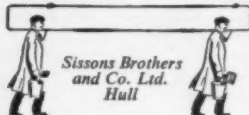
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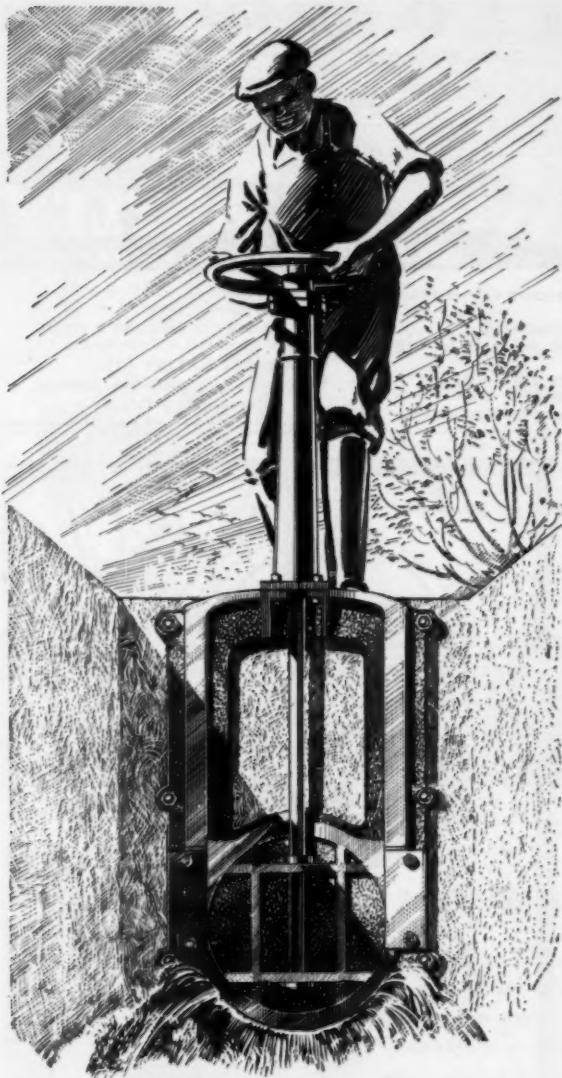
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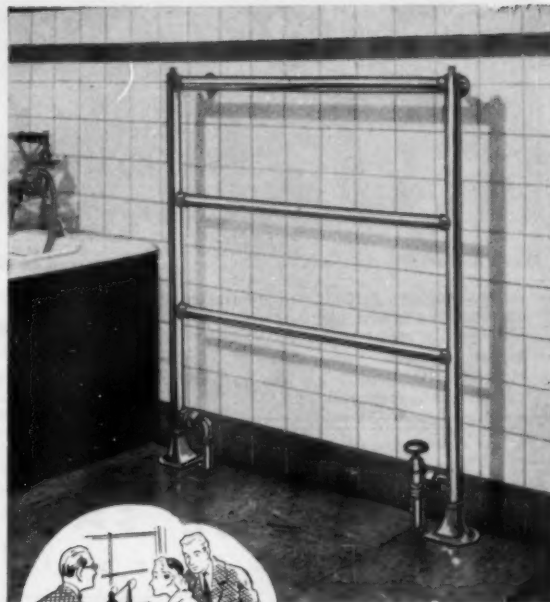
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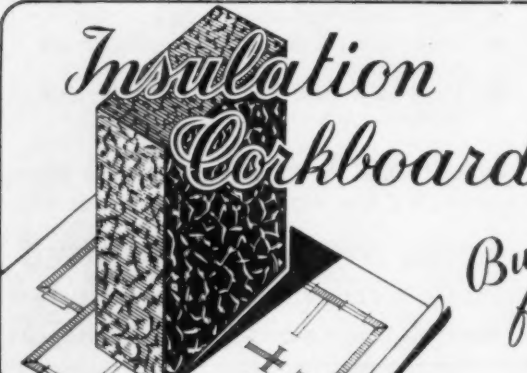
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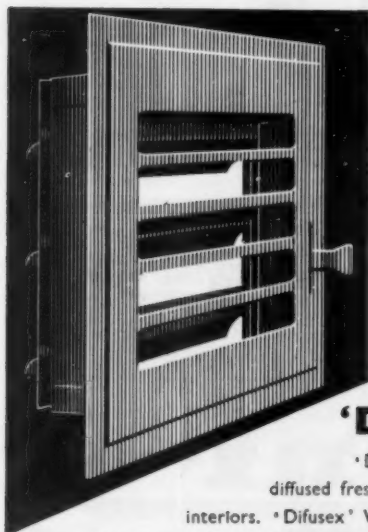
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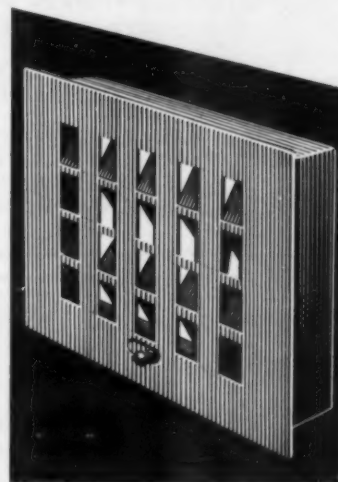


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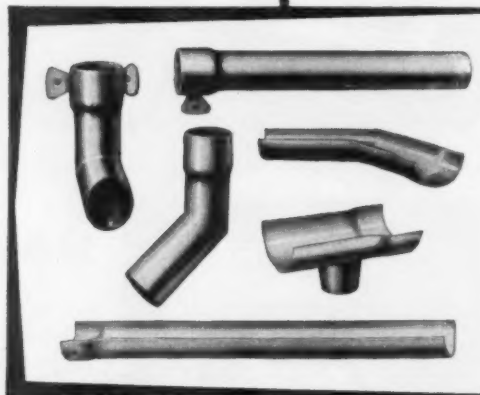
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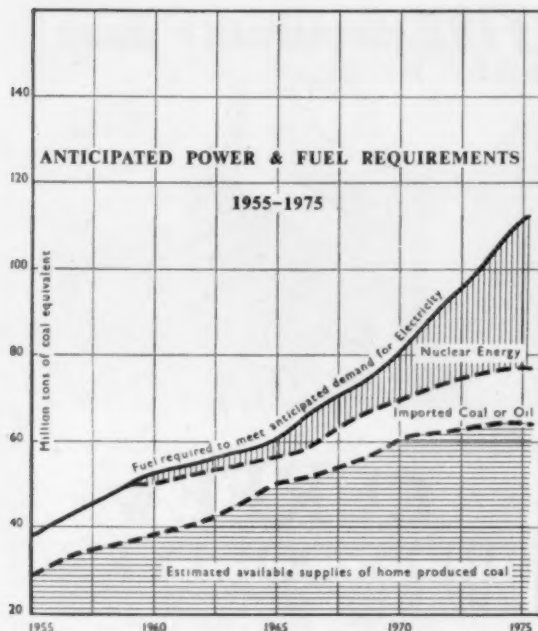
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The First Ten Years

Work will start on the first two nuclear power stations in 1957. These will each have two gas-cooled reactors and the stations will be in operation by 1960/61. Two further gas-cooled reactor stations — each housing two reactors of improved type — to be begun in 1958/9 will come into service by 1963. The output of these four stations will be between 400,000-800,000 kilowatts.

The construction of two groups of four stations each will begin in 1960 and 1961/2 and they will be supplying electricity to the Grid by 1963/4 and 1965 respectively. The first group of stations will probably

have one gas-cooled reactor each. The second will probably utilise liquid-cooled reactors — one high-rated reactor each. These stations will add well over 1,000,000 kilowatts to the nation's power resources.

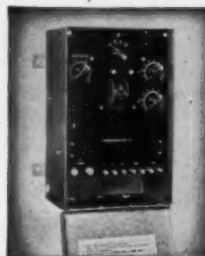
The Second Ten Years

By 1975, it is anticipated that nuclear reactor power stations in Britain will have an aggregate installed capacity of between 10,000,000 and 15,000,000 kilowatts. Since these stations will be operated as base load stations working at full output for twenty-four hours a day they will be responsible for possibly half the units generated in the country.

In ten years' time—1,500,000 to 2,000,000 kilowatts of nuclear power. In twenty years' time—10,000,000 to 15,000,000 kilowatts of nuclear power, equivalent to 40-50,000,000 tons of coal a year.



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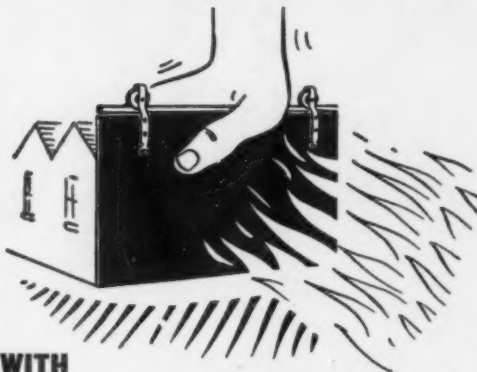


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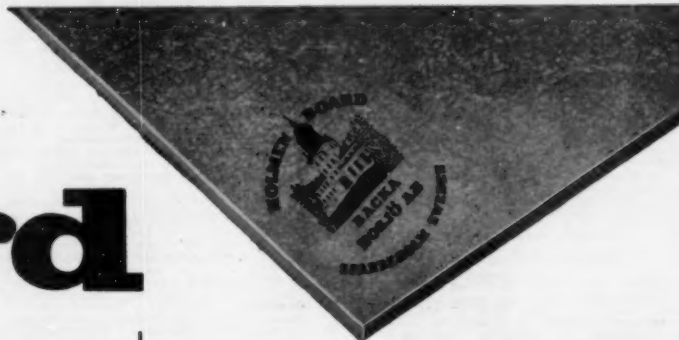


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APPOINTMENTS

CITY OF BIRMINGHAM

CITY ARCHITECT'S DEPARTMENT

APPLICATIONS are invited for the following appointments:

- (a) Assistant Architects, Grade A.P.T. V (£795/£970 per annum).
- (b) Assistant Architects, Grade A.P.T. IV (£710/£885 per annum).
- (c) Architectural Assistants, Special Classes, (£690/£840 per annum). Ad hoc Scale.
- (d) Architectural Assistants, Special Classes, (£615/£695 per annum). Grade A.P.T. II.
- (e) Architectural Assistants, Special Classes, (£550/£630 per annum). Grade A.P.T. I.

Applications for posts (a) and (b) must be Associate Members of the R.I.B.A., or hold equivalent qualifications, and for posts (c), (d) and (e), must be suitably qualified in accordance with the Regulations of the National Joint Council for Architectural Assistants.

The commencing salary in all grades will be according to capabilities and experience.

The posts are permanent, subject to a medical examination, to one month's notice on either side, and to the Provisions of the Local Government Superannuation Acts and the Birmingham Municipal Officers' Widows' and Orphans' Pension Scheme.

Applications, endorsed with the heading of the post, stating age, present position and salary, qualifications and experience, together with the names of two persons to whom reference can be made, should reach the undersigned by not later than 31st August, 1956.

Canvassing disqualifies.

A. G. SHEPPARD FIDLER,

City Architect.

Civic Centre, Birmingham. [2626]

HEMEL HEMPSTEAD DEVELOPMENT CORPORATION

APPOINTMENT OF DEPUTY CHIEF ARCHITECT, £1,625-£1,900.

APPLICATIONS are invited for the post of Deputy Chief Architect, responsible to the Chief Architect, H. Kellett Ablett, F.R.I.B.A., M.T.P.I. The requirement is for a Qualified Architect of determination and energy with first class organising ability and able to control large staff. He should have a wide experience of design and construction in housing, industrial and commercial development.

Housing can be provided. Forms of application, endorsed "Vacancy No. 2" can be obtained from the General Manager, Hemel Hempstead Development Corporation, Westbrook Hay, Hemel Hempstead, Herts., and applications are required to be in by 31st August, 1956. [2627]

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

VACANCY for Grade III (up to £987) for maintenance, repair and small improvements of Council buildings. Experience of alteration work and maintenance work on schedule basis an advantage; A.R.I.B.A., or A.R.I.C.S., desirable.

Particulars and application form, returnable by 23rd August, 1956 from The Architect, (AR/EK/M/4) County Hall, S.E.1. (1599). [2630]

METROPOLITAN BOROUGH OF LEWISHAM

ASSISTANT ARCHITECT

SALARY Scale £700 rising to £870 p.a. (N.J.C. Special Scale, plus London "weighting"). Commencing salary according to experience and qualifications. Particulars and forms of application from Town Clerk, Lewisham Town Hall, Catford, S.E.8. Closing date 1st September, 1956. [2621]

AYCLIFFE DEVELOPMENT CORPORATION

CHIEF ARCHITECT'S DEPARTMENT

ARCHITECTURAL ASSISTANT A.P.T. IV, (£710 x £835-£885 p.a.)

APPLICATIONS are invited for the above post from persons approaching the final standard of the R.I.B.A. Applicants should have had at least three years' varied experience.

Appointment subject to N.J.C. conditions, superannuation and medical examination.

Housing accommodation provided if necessary. Applications stating age, qualifications and experience, together with the names of two referees to arrive not later than 25th August, 1956.

A. V. WILLIAMS,

General Manager.

Newton Aycliffe, nr. Darlington, Co. Durham. [2618]

APPOINTMENTS—contd.

DURHAM COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

APPOINTMENT OF ASSISTANT ARCHITECTS

IN connection with their proposal to erect new County Offices, the Council require a QUALIFIED ARCHITECT to prepare drawings and supervise the erection of the building. The person appointed will be in charge of a small team who, together, will be responsible to the County Architect. Candidates should have a flair for design and must have had experience in the design and construction of multi-storey buildings. Salary—£1,175 by £55 to £1,405.

Applications are also invited from QUALIFIED ARCHITECTS for appointment on salary scales A.P.T. V (£795 x £35 to £970) and A.P.T. VI (£880 x £40 to £1,060).

All appointments are subject to medical examinations for the purposes of the Local Government Superannuation Acts, the Council's regulations and the National Joint Council's Scheme for the time being governing payment of salary during sickness, annual leave and other conditions of service.

Applications including the names and addresses of two persons to whom reference may be made must reach the County Architect, South Street, Durham, by 28th August, 1956.

J. K. HOPE,

Clerk of the County Council.

Shire Hall,

Durham,

27th July, 1956. [2614]

CITY OF LEEDS EDUCATION COMMITTEE

LEEDS COLLEGE OF ART

Principal: E. W. Taylor, R.E., A.R.C.A. School of Architecture and Town Planning Head: F. Chippindale, F.R.I.B.A.

REQUIRED as soon as possible an Architect (man) school trained, as studio instructor and lecturer, with lively interest in Design. Previous teaching experience not essential but sound office experience desirable.

Salary—Burnham Technical Scales for Senior Lecturer, at present £1,045 x 25-£1,215. Revised scale from 1st October, 1956, subject to final approval of new Technical Scales, £1,350 x 50-£1,550.

Application forms may be obtained from the undersigned and should be returned within fourteen days of the appearance of this advertisement. Candidates who have applied previously need not re-apply.

GEORGE TAYLOR,

Chief Education Officer.

Education Department,

Leeds, 1. [2647]

BOROUGH OF WALTHAMSTOW

APPLICATIONS are invited for the following appointment in the Department of F. G. Southgate, A.R.I.B.A., M.I.Mun.E., A.M.T.P.I., Borough Architect, Engineer and Surveyor.

ASSISTANT QUANTITY SURVEYOR

The salary for the post will be in accordance with A.P.T. Grade II (£625-£705, inclusive of London weighting) with the commencing salary according to experience.

Applicants must have had at least two years' recent practical experience.

Applications with the names of two persons for reference should be received by the undersigned not later than noon on Friday, 31st August, 1956, endorsed "Assistant Quantity Surveyor".

G. A. BLAKELEY,

Town Clerk.

3rd August, 1956.

Town Hall,

Walthamstow,

E.17. [2632]

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REQUIRED for duty with the Ministry of Local Government and Housing. Contract appointment for two tours of 18-24 months in first instance. Salary range £1,180-£2,020 p.a. plus temporary addition of £29 15s. p.a. Gratuity £150 for each year of satisfactory service on completion of contract. Free passages for officer, wife and up to 3 children under 13. Quarters at low rental. Generous home leave on full salary. Candidates under 45, must be A.M.T.P. have recognised exempting qualification and in addition either A.R.I.B.A., A.M.I.C.E., A.R.I.C.S. or A.M.I.Mun.E. Write Director of Recruitment, Colonial Office, London, S.W.1, giving age, qualifications and experience, quoting BCD.163/13/03. [2633]

APPOINTMENTS—contd.

BOROUGH OF SWINTON AND PENDLEBURY

CHIEF ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for this appointment in the department of the Borough Engineer and Surveyor. Salary within the Grades A.P.T. IV-V (£710/£970 per annum). Applicants must hold the final qualification of R.I.B.A., and be registered architects with good experience in municipal housing.

Details from Borough Surveyor, Town Hall, Swinton, Lancashire. Closing date for return of form of application 10th September 1956.

Canvassing disqualifies.

VINCENT COLLINGS,

Town Clerk.

THE POLYTECHNIC

300 Regent Street, W.1.

SCHOOL OF ARCHITECTURE, SURVEYING AND TOWN PLANNING

VACANCIES exist for two full-time teachers, (1) with Architectural, Engineering or Surveying qualifications with interest in the technical and scientific aspects of the course, and (2) a studio master who should be an A.R.I.B.A., and a graduate of a fully recognised school of architecture. Both posts are Grade D, Burnham (Further Education) scale appointments, the salary scale at present having a maximum of £820 per annum plus London allowance of £36 or £48 and additional allowances for graduation and training. The proposed scale from October 1st next is considerably higher.

A form of application can be obtained by sending a stamped addressed envelope to the undersigned.

J. C. JONES,

Director of Education.

[2635]

HAMPSHIRE

APPLICATIONS are invited for the following appointments in the County Architect's Department:—

- (a) Assistant Architect, Grade V (£795-£970).
- (b) Architectural Assistant, Grade III (£640-£765).

Candidates for appointment:—

- (a) must have completed the final R.I.B.A. examination, with at least five years' good general experience in the design and construction of Public Buildings. The appointment will be terminable by three calendar months' notice on either side.

- (b) must have passed the Intermediate R.I.B.A. examination or its equivalent at one of the recognised Schools of Architecture and have had suitable office experience.

The appointments are pensionable and subject to satisfactory medical reports. In approved cases the County Council are prepared to assist in meeting removal and other expenses.

Applications, on forms obtainable from the County Architect, The Castle, Winchester, should reach him by the 31st August. [2637]

WELLINGTON (SALOP) URBAN DISTRICT COUNCIL

APPOINTMENT OF QUANTITY SURVEYOR AND ASSISTANT ARCHITECT

APPLICATIONS are invited for the following appointments on the capital works staff:—

- (a) Quantity Surveyor—A.P.T. 4.
- (b) Assistant Architect—A.P.T. 4 or 5 according to experience and qualifications.

The Council are undertaking a large housing programme and the present appointments are in connection with central re-development for flats and a large-scale housing estate.

Applicants for appointment (a) should be competent to prepare bills of quantities, interim valuations for payment, measurement of variations and settlement of final accounts.

Applications for appointment (b) should be conversant with local authority housing.

Applications stating age, qualifications, present and previous appointments, details of experience together with copies of three recent testimonials, should reach the undersigned not later than Monday, 3rd September, 1956.

B. H. J. RENSHAW,

Clerk of the Council.

14 Walker Street,

Wellington,

Shropshire,

9th August, 1956. [2638]

APPOINTMENTS—contd.

LONDON COUNTY COUNCIL requires:
(1) LANDSCAPE ARCHITECTURAL ASSISTANTS for new parks, playing fields, school grounds.
(2) ARCHITECTURAL ASSISTANTS for work on sports pavilions, cafes, service buildings, etc., in parks.

Salaries up to £817 10s. a year according to qualifications and experience.
Apply, giving brief particulars, to Chief Officer of the Parks Department, Old County Hall, Spring Gardens, S.W.1. (Whitehall 3121, Ex. 319). (1949).

COUNTY BOROUGH OF EAST HAM
BOROUGH ENGINEER'S DEPARTMENT

BONUS SURVEYOR—Grade II £505—£675

LONDON Weighing is paid in addition. Salary in excess of the minimum may be paid according to qualifications and experience.

Subsistence allowance may be granted over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by 31st August, 1956 from the Town Clerk, Town Hall, East Ham, E.6. [2623]

BOROUGH OF ELLESMERE PORT

APPOINTMENT OF ARCHITECTURAL ASSISTANT

APPLICATIONS are invited from experienced men for the above appointment on the permanent salaried staff of the Borough Engineer and Surveyor. Applicants must have completed their professional training and have had a good general architectural experience, preferably in a Local Government Department, and preference will be given to those who have passed the preliminary examination of the R.I.B.A. The post is a supernumerated post within Grade II—III (£595—£765 per annum) of the A.P.T. Division of the National Salary Scales. A weekly tenancy of a Council house will be offered to the successful candidate on appointment if he reasonably requires accommodation. Applications, stating age, qualifications, experience and giving the names and addresses of two referees, must reach me by not later than Friday, the 31st August, 1956.

P. J. HODGES,
Town Clerk.

Municipal Offices,
Ellesmere Port,
Cheshire.
14th August, 1956. [2644]

AUCTION

SOUTH Coast, Hayling Island. Valuable Block of building land for 26 houses, adjoining Langstone Harbour and Hayling Golf Links, fronting Public Road with Main Electricity and Water. Also Building Land of 41 acres. Forming part of the Sinal Warren Estate of 63 acres, which also includes a modern 14-bedroom residence, pig and poultry farm with modernised house, cottage and buildings, farmland and woodland. Freehold for sale by Auction with Vacant possession as a whole or in 5 Lots at Elizabeth House, 54-56 Commercial Road, Portsmouth on Wednesday, 9th September at 3 p.m. Auctioneers: Messrs. Hall, Pain & Foister, 48 West Street, Fareham, Hants. Tel. 2347. Messrs. Knight, Frank & Rutley, 20 Hanover Square, London, W.1. (Tel. MAYfair 3771). [2645]

EDUCATIONAL

THE POLYTECHNIC

309 REGENT STREET, W.1.
SCHOOL OF ARCHITECTURE
SURVEYING AND TOWN PLANNING

Head of the School:
John S. Walkden, F.R.I.B.A., M.T.P.I.

DAY SCHOOL
The Day School of Architecture is fully recognised

by the Royal Institute of British Architects. The Final Diploma Examination of the School, together with the necessary practical experience and examination in Professional Practice, is a qualification for registration under the Architects (Registration) Act.

The course embraces all aspects of Architectural Education, including Interior Design, Structural Design and Equipment, and the Science of Building Materials.

The Day School of Surveying offers courses in Building and Quantity Surveying.

Session commences 18th September, 1956.

EVENING SCHOOL

Professional courses are available for pupils and assistants in the Architectural, Town Planning and Surveying Professions.

Prospectus may be obtained on application to the DIRECTOR OF EDUCATION. [2628]

TUITION

COURSES FOR R.I.B.A. EXAMS

POSTAL tuition in any subject or for full syllabus of Inter. Final or Special Final, including Professional Practice. Revision Courses arranged to promote individual requirements. Courses also available in general educational subjects for G.C.E., R.I.C.S. Preliminary, etc.

THE ELLIS SCHOOL OF ARCHITECTURE

(Principal: A. B. Waters, F.R.I.B.A.) 103D, Old Brompton Road, London, S.W.7 (KEN 4477), and at Worcester. [0789]

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No responsibility accepted for errors.

ARCHITECTURAL APPOINTMENTS VACANT

ARCHITECTS' Assistant required. Senior and Junior for varied practice. Salary according to qualifications and experience. Staff bonus and pension schemes.—Write Beecher & Stamford, F/A.R.I.B.A., 14, Park End Street, Oxford. [2610]

ARCHITECT'S Co-partnership require Assistant for working drawings and detailed design. Salary according to experience. Office doing work in U.K. and West Africa. Holiday can be taken this year.—Write: 44, Charlotte Street, London, W.1, or telephone Langham 5791. [0002]

SCHERRER & HICKS, 19 Cavendish Square, W.1. (Tel. Museum 1105), require immediately several Architectural Assistants of intermediate standard. The work is varied and covers Research Laboratories, Offices, Housing and Schools. Five day week. Salary by arrangement. [2623]

ARCHITECTURAL Assistant required in the Regional Architect's office to work on projects connected with the Railway Modernisation Plan. Good educational standard and high standard of draughtsmanship required. Salary range £730 to £706 per annum, according to age, qualifications and experience. Residential and other travel concessions available.—Apply giving age, experience and qualifications to H. E. B. Cavanagh, A.R.I.B.A., Architect, Chief Civil Engineer's Office, British Railways (Western Region), Paddington, W.2. [2624]

ASSISTANT Architects required in the Regional Architect's Office to work on projects connected with the Railway Modernisation Plan. Must be a student of the R.I.B.A., or be qualified to sit for the Special Final Examination of the R.I.B.A. within the next two years. Must produce evidence of high standard of architectural design and knowledge of modern building technique. Salary range £730 to £706 per annum. Prospects of further promotion for entrants showing outstanding qualities of leadership and responsibility. Residential and other travel concessions available.—Apply giving age, experience and qualifications to H. E. B. Cavanagh, A.R.I.B.A., Architect, Chief Civil Engineer's Office, British Railways (Western Region), Paddington, W.2. [2625]

ARCHITECT'S Assistant required for the London office of a firm of Architects with interests throughout the country, must be of intermediate R.I.B.A. or R.I.C.S. standard. Supernumeration scheme.—Apply, in writing, to Messrs. Cotton, Ballard & Blow, 5, Baker Street, London, W.1. [0009]

ARCHITECTURAL Assistants and Junior Architectural Assistants required by Hackney Borough Council for extensive programme of new housing, public baths, libraries and other public buildings. Appointments may be in grade A.P.T. I (£530—£610), A.P.T. II (£595—£675) or A.P.T. III (£640—£765) p.a., singly or combined, plus London weighting allowance of up to £30 p.a. Candidates must be Probationers or Students of R.I.B.A. Grade and commencing salary according to training, qualifications and experience.

Application form obtainable from the Town Clerk, Town Hall, E.6, returnable by 29th August, 1956, quoting reference H.2. [2636]

ARCHITECTURAL assistant required in Architects Department of Schweppe's Limited. Interesting work throughout the country. Salary according to experience and qualifications. Preference will be given to the applicant in early twenties with minimum of two years' office experience and capable of undertaking small projects with minimum supervision. Write giving age, full particulars of experience and salary required to Personnel Manager, 1-4 Connaught Place, London, W.1. [2639]

ARCHITECTURAL DRAUGHTSMEN for Industrial Building and/or Staff housing. Good salary, pension scheme. Apply stating age, qualifications and experience, Staff Personnel Manager, Ashmore Benson, Pease & Co., Stockton-on-Tees [2642]

SITUATIONS VACANT—contd.

IF you are qualified and think that a knowledge of construction and good draughtsmanship are not incompatible with good design and that administration is not the essence of architecture, write to Box No. 3597, c/o A. & B. N., stating details of your career and salary required. [2631]

A.M.I.Mech.E. with some electrical and building constructional experience, or A.M.I.C.E. with mechanical and electrical experience, required for interesting position in the Middle East. Age preferably 30-35. Basic salary according to experience plus free furnished quarters and living allowance. Apply with full details to Box No. 3599, c/o A. & B. N. [2634]

SITUATIONS WANTED

A.R.I.B.A. wide experience, seeks responsible position. Car owner. Salary £1,200 p.a.—Box 3418, c/o A. & B. N. [0016]

A.R.I.B.A. offers part-time assistance while working up own practice. Car owner.—Box 3417, c/o A. & B. N. [2604]

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FORGOTTEN PEOPLE. LIGITA. Daughter of Latvian Lawyer in Displaced Persons Camp. (Parents income £10 a month). Ligita won scholarship for School of Architecture but cannot take it without financial help. £35 would enable her to start studies. Please help.—Adoption Committee for Asia to Displaced Persons, 277 Edgware Road, London, W.2. [2641]

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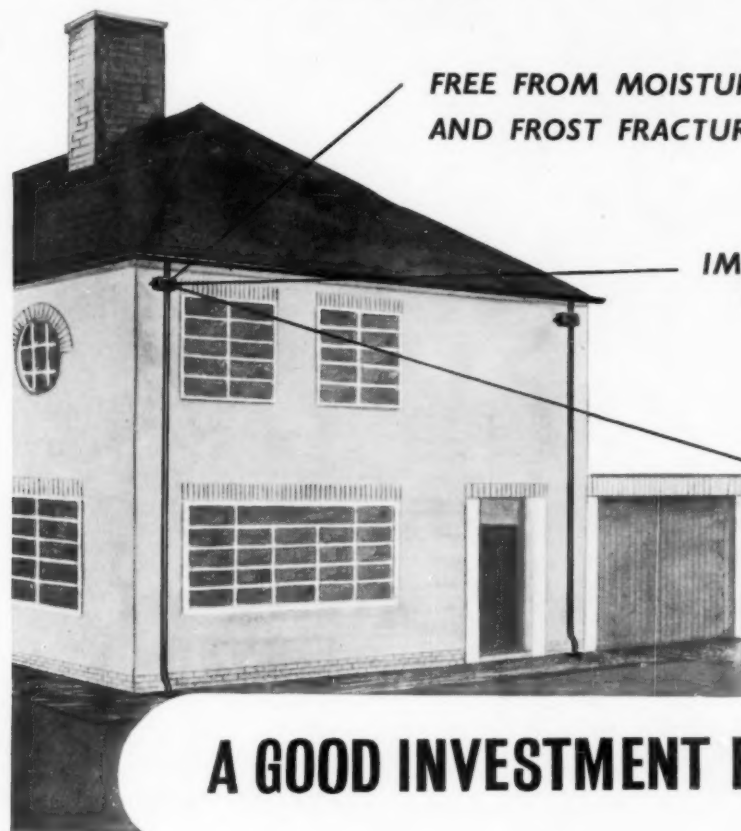
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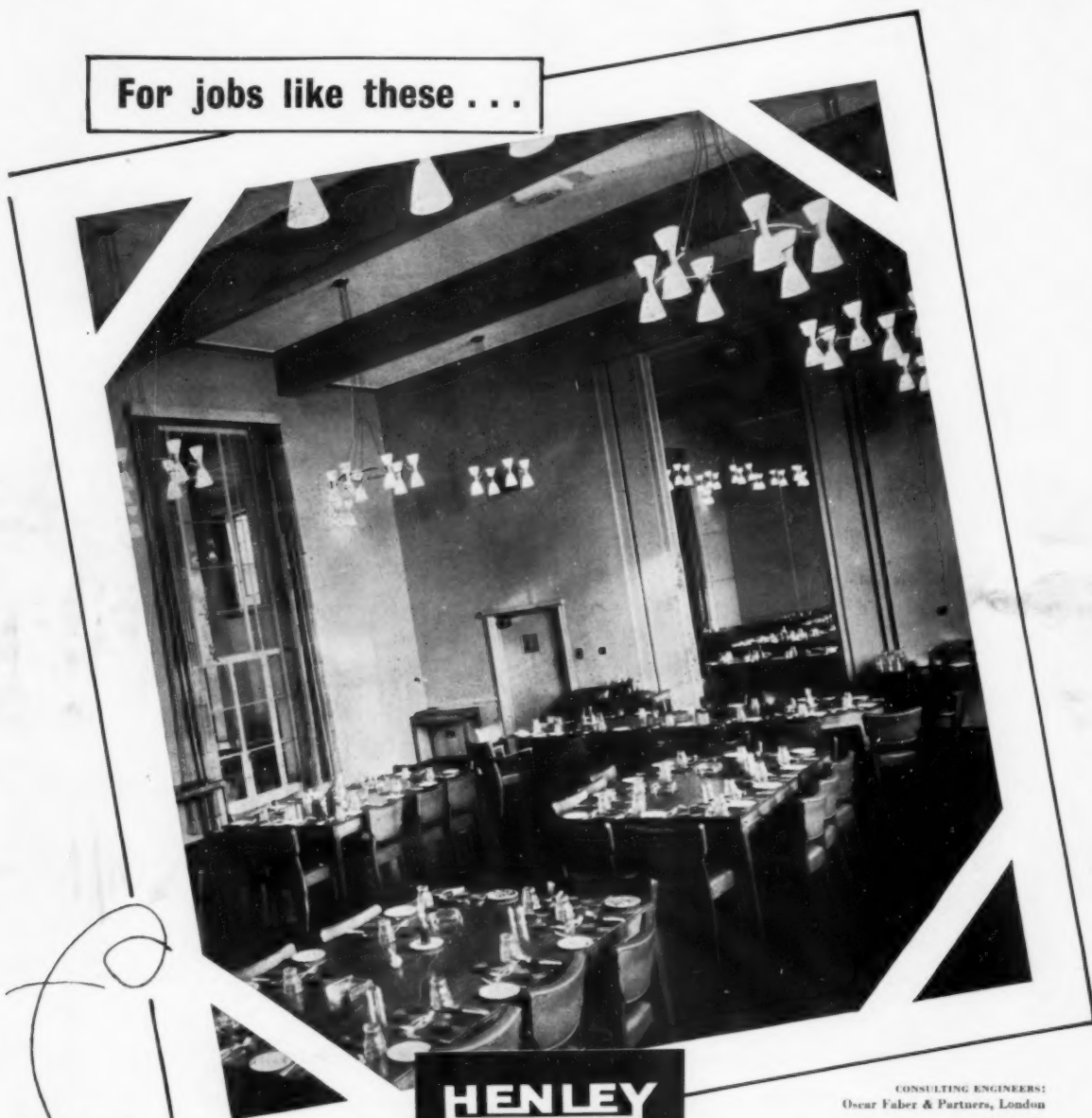
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